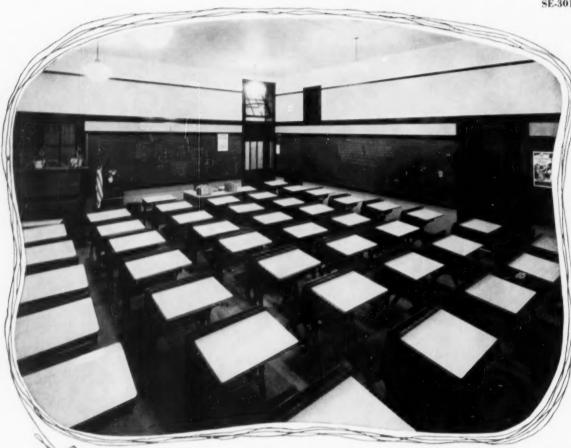
School Executive



The case for private schools
—page 19



This is not a classroom you dream about this is for REAL!

It would be wonderful if every school room in America looked like an architect's dream. But realistically many of our children go to the same school we did-some sit at the same desks.

Formica ® is playing an increasingly important part in the refurbishing of these older schools. Here the dark, rough desk tops for students and teacher were resurfaced with a light, bright super-smooth Formica wood grain pattern. The work was performed by the school's maintenance crew in their own shop. Many localities have professional Formica fabricators who specialize in revitalizing school furniture.

Why not let a Formica representative advise you on resurfacing with beautiful, long-lasting Formica in classrooms, lunchroom, home economics kitchens, laboratories, or library.

We'll see that you are contacted without obligation.

Just write FORMICA 4576 Spring Grove Ave., Cincinnati 32, Ohio

In Canada: Arnold Banfield & Ca., Ockville, Ontario.



The School Executive

OCTOBER, 1955

VOLUME 75 NUMBER 2

CONTENTS

EDITORIALS	Preview for November Selecting Potential School Administrators	2 2 9
GREEN SHEET	The Case for Private Schools	
SCHOOLS IN ACTION	Teen-Agers Ask for Help Albert M. Lerch Taking in the "In-Migrant" Galeta M. Kaar A "Community-Centered" Report Card Theo. J. Norby and Albert Grant How Much Homework? Jack H. Lipsy Educators Must Answer Keith W. Atkinson Selecting School Bus Drivers P. A. Wickstrom What Makes a Good Teacher? Josephine B. Wolfo Substitute Teachers Are Important Victor E. Leonard Pupils Without Books William E. Spaulding England's Village Colleges Samuel Everett Explaining District Reorganization David M. Dennis What Price Learning? Rus Walton	50 52 55 56 58 60 62 64 66 68
SCHOOL PLANT	School Plant News and Views	
SPECIAL	Paul and Joe Talk Schools	77
PLANNING SECTION	The Pacific Southwest CPEA Regional and Statewide Programs William R. Odell Interdisciplinary Activities Keith Goldhammer School Planning Laboratory James D. MacConnell Internship Program in Administration Jon S. Peters Project in Administrator Selection Merle H. Elliott Research Activities Arthur P. Coladarci	82 85 87
NEWS	Spotlight—News of the Educational Field	
LUNCH	Purchasing and Storing Food Kathleen Wilson	163
DEPARTMENTS	Conference Calendar	210

WALTER D. COCKING, Editor

N. L. ENGELHARDT, Consulting Editor

Editorial Staff:

L. Karen Beach, Associate Editor Rosalyn Regelson, Assistant Editor Dolores M. Sloon. Assistant Editor Belmont Farley, Washington Correspondent Harold F. Clark, Consultant

COVER Photo courtesy Standard Oil Co., N. J.

MATTHEW J. PILLARD, Managing Editor

Betty K. Johnson, Book Reviewer Henry E. Salloch, Art Director Helen E. Weyl, Production Manager William Carlisle, Circulation Manager Lillian E. Kiley, Research and Sorvice

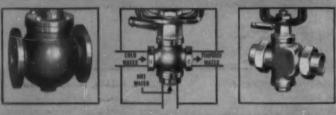
POWERS No. 11 Self-Operating

TEMPERATURE REGULATOR

Automatically holds temperature constant at the right point.

Prevents losses caused by wasteful OVER-heating.



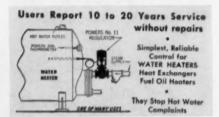


Various Valve Bodies and Inner Valves are available. Single and Double Seat Valves thru 2" have rugged bronze bodies with bronze union connections for quick, easy installation. Bulletin 329 gives information about all types.

Why It Gives

BETTER CONTROL

and Saves More Money



ONLY POWERS No. 11 REGULATOR Offers ALL These Advantages

- Simple, sturdy construction. Materials used are corrosion resistant.
- Powers bellows has 50% more power than used in the majority of regulators. The heart of a self operating regulator is its bellows. Powers with its 50% greater effective area gives better control and its durable 2 ply bellows outlasts ordinary single ply bellows.
- Valve stem lubricator with silicone grease aids easy movement of highly polished stainless steel valve stem and reduces drying out of packing.
- BETTER CONTROL results from Powers powerful bellows and minimum of valve stem friction.
- 60°F. temperature ranges available with accuracy of ±1°F. on some processes and 2 to 3°F. on others.
- Rugged bronze valve bodies with bronze union connections, for single and double seat valves thru 2", reduce installation time and labor. Larger sizes have flanged iron body valves.
- Powers Nationwide Service and 24 Hour Delivery in the U.S.A. are important time and money saving advantages.



• Indicating Regulator with easy to read 4" dial thermometer helps adjust the regulator and check temperature at the bulb. Various dials and ranges are available.

Right type and size of valve is important for good control. May we help you make the right selection? Benefit from

POWERS more than 60 years experience with self-operating regulators.

Call our nearest office or write us direct for Bulletin 329.

THE POWERS REGULATOR CO.

Skokie, Ill. Offices in Chief Cities in U.S.A.
Canada and Mexico | See your phone book
Automatic Temperature and Humidity Control
Established 1891

The School Executive

Editorial and Executive Offices

470 Fourth Avenue, New York 16, N. Y.

Edgar J. Buttenheim Chairman, Board of Directors

Prentice C. Ford President

Edwin Wagner Secretary and Treasurer

Frank H. Laavy Advertising Manager

Branch Offices

Chicago 6, Illinois-Daily News Bldg.

Frank J. Raymond Vice-President

John A. Raymond Western Advertising Manager

Cleveland 14, Ohio-602 The Arcade Frank E. Smith

Los Angeles 27, California-2238 Ben Lomond Drive Albert T. Miller Pacific Coast Manager

Lookout Mountain, Tenn.-P.O. Box 66 Curtis R. Buttenheim Southern Sales Manager

Editorial Advisory Board

Terms Expire December 31, 1955:

R. L. Hopper

Head, Department of Administrative and Educational Services, College of Education, Michigan State University, East

John E. Ivey, Jr. Executive Director, Southern Regional Education, Atlanta, Georgia

M. S. Kies County Superintendent of Schools, Milwaukee, Wisconsin

Harold B. Gores Superintendent of Schools, Newton, Massachusetts

L. H. Shepoiser Superintendent of Schools, Mason City,

Terms Expire December 31, 1956:

E. Allen Bateman State Superintendent of Public Instruc-tion, Salt Lake City, Utah

Walter K. Beggs Professor of Education, University of Nebraska, Lincoln, Nebraska

Daniel R. Davies Professor of Education, Teachers College, Columbia University

L. G. Derthick Superintendent of Schools, Chattanooga, Tennessee

Edward J. Russell
Superintendent of Schools, Pittsfield, Massachusetts

Terms Expire December 31, 1957:

Harley W. Anderson Secretary-Treasurer, Association of School Business Officials, Kalamazoo, Michigan

Preview for November

Among the many interesting stories scheduled to appear in the November School Executive are:

An analysis of the Indiana formula for state support of school transportation, by W. M. Barr, associate professor of education at

The story of a New York community's campaign for centralization and school bond issues which finally resulted in three urgently-needed

A description of Grand Island, Nebraska, Schools' program for democratic coordination of the curriculum, by Wayne P. Marshall, curriculum coordinator.

A look into the task of recruiting capable young people for teaching (November's Green Sheet), by Richard C. Lonsdale, associate professor of education at Syracuse University.

A symposium on the use of television in six city school systems: San Francisco, Schenectady, Houston, Minneapolis, Atlanta, and Washington, D.C.

All the regular features, of course, will appear.

Sincerely, Walter D. Cocking, editor

W. W. Caudill Architect, Caudill, Rowlett, Scott and Associates, Bryan, Texas

Ira Jarrell Superintendent of Schools, Atlanta, Georgia

Bruce Miller Superintendent of Schools, Riverside, California

Pearl Wanamaker State Superintendent of Public Instruc-tion, Olympia, Washington

Terms Expire December 31, 1958:

John H. Fischer Superintendent of Schools Baltimore, Maryland

Paul A. Miller Superintendent of Schools Syracuse, New York

Irvin P. Murphy Director of Secondary Education, State Dept. of Education, Santa Fe, New Mexico

William O. Penrose Dean, School of Education University of Delaware Newark, Delaware

Archibald B. Shaw Superintendent of Schools Scarsdale, New York

Terms Expire December 31, 1959:

Russell T. Gregg Professor of Education, University of Wisconsin, Madison

L. D. Haskew Vice President and Dean, College of Education, University of Texas, Austin

Edgar L. Morphet Professor of Education, University of California, Berkeley

Truman L. Pierce Dean, College of Education, Alabama Polytechnic Institute, Auburn

G. E. Rast Superintendent of Schools Westport, Connecticut

THE SCHOOL EXECUTIVE is published monthly at Orange, Conn., by the American School Publishing Corporation. Edgar J. Buttenheim Cheirman of the Board, Prentice C. Ford, President; Prank Raymond, Vice-President; Edwin Wagner, Secretory and Transurer: Entered as second-team matter at the Peat Office at Orange, Connection, under the act of March 3, 1879, Subscription retest United States and Canada—I year, \$4.00, 2 years, \$7.00; 50¢ per copy; back or reference issues \$1.00 per copy. Other Foreign Countries—\$7.00 a year. Mamber of "Audit Bureau of Circulations" and Educational Press Association. Copyright, 1935, by American School Publishing Corporation, 470 Fourth Avenue, New York 16, New York.

Save the coat, Walt...

I've got FORT HOWARD PAPER TOWELS!





No need to furl the farthingale . . . not when Fort Howard Paper Towels absorb so much moisture so quickly — yet stay strong and firm when wet! What's more, Fort Howard's Acid-Free Paper means kinder, gentler drying, too!

Call your Fort Howard distributor . . . and let him recommend the towel service that fits your specific needs, from Fort Howard's 18 different grades and folds.



FORT HOWARD PAPER COMPANY, Green Boy, Wisconsin

For 36 Years, Manufacturers of Quality Towels Tailet Tissue and Paper Napkins



AS I SEE IT/

by to alen & Jocking

Selecting Potential School Administrators

EVERY MEMBER of a profession has a responsibility for its future. He should do something about it. School administrators, I know, believe that the task of school administration demands that their successors be more able and competent men and women than they are. What can they do about it?

As I see it, they can do several things. They can be constantly on the lookout for young people who possess the traits which are necessary for success in school administration. Among such traits, I would name a sincere liking for people, initiative, stability, imagination, industriousness, rugged physical characteristics, high moral sense and unquestioned integrity.

The school administrator has a distinct advantage over the members of most other professions in finding promising young people. Most of the young people of his community come under his observation and supervision. He has the opportunity to know many of them. He is acquainted with their records. He learns at first hand of their successes and failures. He knows their ambitions and ideals. He has the opportunity to test their moral fibers. He can check their abilities in scholarship. He can form realistic judgments of their citizenship qualities.

If the administrator in turn is imbued with a responsibility for his profession, then he is in an excellent position to select young people who seem to have the characteristics needed for success in school administration. Need it be said that the school administrator of the future should be chosen from the very best and able of our young people. The administrator of today has that opportunity.

THEN THE ADMINISTRATOR has the opportunity to talk with the selected group about school administration as a career. Young people are much concerned with the problem of choosing a vocation. They covet suggestions and guidance from those they respect. The administrator's task as a counselor is not to persuade, but rather to describe the job, outline the competencies and characteristics needed and help the young people to assay themselves. I am sure that not only would such help be favorably received, but also many promising young people would be attracted to the field of school administration as a career.

The administrator, of course, has a responsibility for

the preparation of people for his profession. It has not always been wanted or given, yet he has much to contribute. His experience on the job alerts him to its ever changing nature. He becomes aware of the abilities it requires. He analyzes himself and his own preparation. He knows the gaps in that preparation, he has ideas how preparation could be improved, he probably becomes aware of unnecessary phases and has the basis for judgment as to where greater and better emphasis would have been helpful.

He can do more. His school system and community can be used as a laboratory for the training of others. He can arrange for internships and guide the interns while they are with him. Probably there is no more helpful part of preparation than that which comes from a successful practitioner's taking the time to become personally acquinted with the young trainee, taking him into his confidence, explaining his views and his reasons for the actions he takes on various problems as they arise. The closer relationships between university personnel and the men on the job, and the growing understanding of a joint responsibility for the preparation of school administrators are among the most promising recent developments. They should be enlarged and encouraged.

THE SCHOOL ADMINISTRATOR, too, is in a good position to serve as a guide to the university. He can be valuable in helping to evaluate its program. He has much to offer as a counselor regarding the nature of the program. He should be in a position to suggest needed types of research. His experience should be put to work.

As I see it, then, the practicing school administrator has an opportunity to contribute much to his profession. I believe he has the responsibility to do it. School administration does not require or need large numbers of people: it does require the best. Entrance into the profession should not be a matter of chance, trial and error, or result from a fleeting hunch.

School administration should be chosen as a career with a clear understanding of the job, the abilities required, and the opportunities and obstacles it presents; it should be chosen with an unselfish acceptance of public service as a challenge and a goal. School administrators can do much, if they will, in making these things come true.

Still another manufacturer chooses St. Regis PANELYTE

JOHN J. NESBITT, INC. finds its color and durability ideal for radiator housing



Nesbitt heating panel along wall is surfaced with St. Regis Panelyte. Desks also used durable St. Regis Panelyte.

THE GROWING NUMBER of school equipment manufacturers utilizing St. Regis Panelyte indicates a significant trend. These manufacturers recognize that Panelyte is ideal because of its durability, permanent beauty and ease of maintenance.

SCHOOL OFFICIALS, too, are aware that the lifetime durability of St. Regis Panelyte enables schools to use it on desks, on cafeteria counters, on laboratory tables, on wainscoting . . , wherever extra wear occurs. They also know that St. Regis Panelyte's low reflectance value protects young eyes.

FOR SAMPLES, write today to Panelyte Division, St. Regis Paper Company, Sales Subsidiary: St. Regis Sales Corporation, 230 Park Avenue, New York 17, N. Y.



Other leading school equipment manufacturers who have specified St. Regis Panelyte • BRUNSWICK-BALKE-COLLENDER COMPANY GENERAL SCHOOL EQUIPMENT CO. • SAMSONITE-SHWAYDER BROS., INC. • MIDWEST FOLDING PRODUCTS

The chief executive

FROM TIME TO TIME, the proposal comes from various sources that a "business man" be made the chief executive of our school systems. This suggestion frequently is made by school board members who are beginning their service in such capacities. Or it may be made by those experienced in managing large corporations.

To be sure, it emanates sometimes from individuals who seek "to get" the man presently in the superintendent's chair. Only recently, however, the proposal was made in what was presumably a professional survey of a school system.

The struggle on the part of the misguided to give the place of prominence and control in public school systems to the business representative will not be successful today anymore than it has been in the past 30 years.

The main purpose of each school system is education. The individual to promote such a program must be a well-trained educator. All other activities within the school system are advanced to make the educational program successful. Action to the contrary should be strongly and consistently opposed.

The unit system is needed for the successful advancement of educational programs and the key individual in such a system *must* be the superintendent of schools.

Ground rules for citizens committees

THE SCHOOL CITIZENS committee works more efficiently, effectively and in the best interests of all . . .

- when organized with the advice, consent and encouragement of the board of education and the school administration.
- 2. when it is clearly understood that its advice and counsel are suggestive and wholly without authority and that any other role is an abuse of function and authority.
- 3. when organized to cooperate exclusively with the public schools and not related to other political subdivisions or groups.
- when it is organized for a specific job. When this is consummated, the best thing for the committee to do, as a rule, is disband.
- 5. when it is formed through community group representation rather than through an appeal for membership on a personal basis. The latter scheme usually appeals to Tom, Dick and Harry—and mostly "Harry" who proceeds to raise "old Harry."
- 6. when there is close collaboration with the school administration in its deliberations.
- 7. when various shades of opinion in the community have an opportunity to be heard and represented.
 - 8. when it becomes a study and research group col-

laborating with the superintendent and faculty of the school.

- 9. when the committee's work is maintained on the highest possible ethical plane and with a view to the least possible disruption of the highly sensitive and technical processes of instruction going on in the classroom.
- 10. when summarized findings and reports are made jointly with the school authorities and with the final decisions left in the hands of a representative board of education.

VIRGIL M. ROGERS

Dean, School of Education

Syracuse University

Syracuse, New York

Schools within a school

School executives are planning now for ways and means of meeting the peak loads in secondary school enrollment to hit most school systems in the early sixties.

One problem to decide before building a new secondary school is the optimum size. Many school principals, teachers and parents feel that the tendency is to build over-large high schools in which the individual fails to get the attention he needs.

Perhaps one way to avoid this is to consider building schools within a school. Under this plan, many autonomous units comprising the various junior and high school grades exist within one all-inclusive unit.

The idea is not new, but its value is being rediscovered as school officials struggle with how to provide school housing for the multitudes and yet assure individual attention.

Educational magazines are improving

HAVE YOU NOTICED the continuing improvement in the quality of your educational magazines? Great progress has been made in the last few years. This improvement applies to local house organs, state and national journals.

Educational editors are working for constant improvement, and the magazines demonstrate they are getting results. A major part of the credit for the improvement goes to administrators, teachers, college professors and architects who prepare the large majority of articles contained in these publications.

Also we must remember those who advertise their products in these journals. The monetary returns make it possible to meet the ever increasing mechanical and production costs of producing these publications.

Now let's be careful to put the magazines to work so that the largest possible benefits will be secured.



every serving saves you money when you SERVE HEARTY NOURISHING HEINZ SOUPS

YOU SAVE ON COST. Each 51-oz. Chef-Size tin makes seventeen delicious 6-oz. servings for less than 3¢ each.

YOU SAVE ON THROW-OUTS. No waste—open cans as you need them.

YOU SAVE ON LABOR. Eliminate major soup preparation costs, yet add even wider variety to your menus. Get the facts and figures from your Heinz man when he calls. Remember, *Chef-Size* Heinz Soups.



FIFTEEN FLAVOR-PACKED VARIETIES FOR LOW-COST MENU APPEAL: Bean · Beef Noodle · Beef and Vegetables Chicken Noodle · Clam Chowder · Chicken Rice · Cream of Chicken · Genuine Turtle · Cream of Mushroom · Cream of Tomato Cream of Pea · Split Pea · Vegetable · Vegetarian Vegetable · Consommé. YOU KNOW IT'S GOOD BECAUSE IT'S HEINZ

39% of schools use consultants

The use of educational consultants in school planning seems to be on the increase. A nation-wide survey of over 400 school districts showed that 39 percent of them employed practicing consultants in the educational planning of their new school buildings; and 49 percent reported that the use of consultants was to be desired.

The extent of their use varies from one region of the country to another. For example, 48 percent of the New England school systems use educational consultants, while only 33 percent in the Middle Atlantic region do so. Other regions fell within this range: 41 percent in the Southern and Central states, and 37 percent in the West. Each region reported that greater use of these consultants was desired.

Schools should be 'subtle'

Asked recently to define what is meant by human values in school architecture, Stanton Leggett, of the educational consulting firm of Engelhardt, Engelhardt and Leggett, said:

"Human values of school buildings are emotional impacts ascribed to them by individuals. I like buildings that are subtle, not showing everything at first glance, but saving for a turn in the corridor, or just a change

Who Should Employ Educational Consultants?

Educational consultants may be used to good advantage any time a school system feels the need for thoroughly evaluating part or all of its program. The capable consultant will provide perspective for the busy school staff—a staff that may well be working with such intensity that neither the individuals nor the group have recognized certain deepening and guiding ruts that have developed. A consultant can provide inspiration, suggest new techniques, and take time to tackle the basic issues. Although his can be the guiding hand, his goal is to create a process of self-evaluation and self-help. Who should employ educational consultants? Any district sincerely willing to look into a mirror and to take action to make its practices current and effective.

—Francis C. Darby Assistant Superintendent, San Diego Public Schools

I firmly believe that if a system is large enough, this service should be performed by its own staff. I feel that outside consultants have a position only when the local resources are not adequate. When such a situation does prevail, I feel that the educational consultant should be employed by the board of education and serve as its representative.

—James F. Redmond Superintendent, Orleans Parish School Board, New Orleans

By all means, boards of education should employ educational consultants regardless of the size and population of the school districts; the smaller districts on an occasional basis, the average districts on a regular part-time basis and the larger systems on a full-time basis. In no case should the superintendent be burdened with the entire responsibility of the educational and building programming in addition to his own duties.

—Carl F. Guenther

Outcalt, Guenther and Assoc., Architects, Cleveland

in light and shadow, or, on another level, having resources that cannot immediately be realized.

"Responding to its uses, a school building should be moody-serene

where peace and isolation are sought, filled with beauty, playful and stimulating where fun or curiosity hold sway. Such a school avoids monotony."

Hexagonal classrooms for new junior high school



Construction began last month on this 1600-pupil Clinton Place Junior High School, Newark, N. J., designed by Kelly & Gruzen. The 40 hexagonal class-rooms are to be housed in a series of 8 clusters, each containing 5 rooms.

Business college cools off

Stone Business College, New Haven, is the first business college in Connecticut to be fully air conditioned, according to school officials. Air conditioning of the entire facility was completed this summer with the installation of four water-cooled packaged conditioners.

Recent published reports on the effect of high temperature on mental efficiency has interested educators to the need of air conditioning. One university study disclosed that the mental efficiency of students decreased by as much as 40 percent during hot, humid weather.

AMERICAN SCHOOL AND UNIVERSITY

put this picture in your school!



People represent profits when your school is popping and selling corn with a CRETORS Popcorn Machine . . . No other money-making enterprise gives your school such a high return—every 10c sale is more than 8c profit! . . . And you can sell whole-some, nutritious popcorn to your students and friends with pride . . . We'll be happy to give you the money-making details by letter, or have a CRETORS distributor explain them to you in person.



(A) "Holiday" Floor Model, low-cost machine especially designed for schools. Also available in Counter Model.

(B) "Ambassador" Floor Model designed by Raymond Loewy. Turns out \$50 worth of popped corn per hour.

(C) "America" low-cost Counter

(C)"AMERICA" Model. Plugs into any 110-volt outlet.

27"x21"x25½" high.

27"x21"

(B)"AMBASSADOR"

Popcorn Machines

Styled for Sales

Engineered for Profits

SALES OFFICE: Cretors, Popcorn Bidg., Nashville, Tenn. • FACTORY: Chicago, Ill. Distributors Coast to Coast • IN CANADA: Super Puff't, Ltd., Toronto Theatre Confections, Ltd., Toronto • Service Confections, Ltd., Winnipeg

Conference Calender

OCTOBER

- 9-12, Tenth National Conference, County and Rural Area Superintendents, Department of Rural Education, NEA, San Diego, California.
- 16-20, Forty-first Annual Convention, Association of School Business Officials of the United States and Canada, Chicago.
- 24, United Nations Day.
- 24-27, Forty-first Annual Convention, National League to Promote School Attendance, Buffalo, New York.
- 31-November 3, Annual Convention, American School Food Service Association, Denver.

NOVEMBER

- 24-26, Thirty-fifth Annual Convention, National Council for the Social Studies, NEA, New York City.
- 6-12, American Education Week.
- 28-Dec. 1, White House Conference on Education, Washington.

FEBRUARY

- 16-18, National School Boards Association, Atlantic City, New Jersey.
- 18-23, National Convention, American Association of School Administrators, NEA, Atlantic City, New Jersey.
- 24-29, Fortieth Annual Convention, National Association of Secondary-School Principals, NEA, Chicago.

MARCH

- 7-10, Department of Elementary School Principals, NEA, Denver.
- 12-17, Department of Audio-Visual Instruction, NEA, Detroit.
- 19-23, Association for Supervision and Curriculum Development, NEA, New York City.
- 21-24, Thirty-Sixth Annual Convention, National Association of Deans of Women, NEA, Cincinnati, Ohio.
- 24-30, American Association for Health, Physical Education and Recreation, NEA, Chicago.

Since the introduction of the Benjamin Porcenell Surface, it has become evident that here is a new concept in modern chalk-boards. Teachers, principals, custodians, purchasing agents and architects alike want to know the full story behind the Better Visibility, Greater Damage Resistance and many other advancements in better seeing and instruction made possible by Porcenell, This new brochure is published to answer that demand.

Now, read the story behind...

NEW BENJAMIN

ORCENELL CHALKBOARDS!

this FREE Brochure brings you the FACTS (including laboratory test data)
every architect and educator should know about this
newest advancement for Better Visual Education.
Send Coupon Today!

Send now for your free copy of this revealing 8-page brochure-all about the lifetime chalkboard, Porcenell. Go behind the scenes to see how Porcenell was developed, after 15 years and 3/4 million dollars of research.* Watch the exacting manufacturing methods and latest processes that give Porcenell chalkboards a new high in visibility. Read and see why this remarkable surface has many times the damage resistance of ordinary boards. Study the many ways in which Porcenell makes possible better, more modern learning. See how Porcenell licks the high cost of installation. It's all here-in eight fact-packed pages that will make fascinating reading to everyone who is interested in the Visual Welfare of Young America!

*Porcenell is a patented, vitreous process developed by Vitreco, Inc., a research organization jointly owned by Youngstown Sheet and Tube Co. and Poor and Co.



Benjamin Electric Mfg. Co., Dept. SE

Des Plaines, Illinois

Please send me a copy of your new brochure "Porcenell Chalkboards ... for the Visual Welfare of Young America". I understand there is no cost or obligation.

NAME

ADDRESS

CITY_

ZONE

STATE

Copyright 1955 Benjamin Electric Mtg. Co



WHERE SCHOOL FLOORS

GET A "WORKOUT"

INSTALL resilient KREOLITE!

The Jennison-Wright Corp.

2463 Broadway Toledo 9, Ohio

Please send me a free sample and complete specifications of Kreolite Flexible Strip End Grain Wood Block Flooring.

Name

Address

City State

Pounding feet and hammering equipment give school gymnasiums, vocational shops and laboratories a continual "workout". Normal flooring materials just can't take this punishment!

That's why so many architects, school boards and school executives are installing Kreolite Flexible Strip End Grain Wood Block Flooring in these school areas. Kreolite Flooring can *really* take it!

The reason is that Kreolite Flooring's durable end grain construction is designed to stand up under constant abuse and yet, retain its natural beauty. And, in addition, Kreolite Flooring is economical to install, resilient, splinter-proof and easy to maintain!

Where beauty and durability in school flooring are essential, install Kreolite Flooring. For complete details, mail the coupon below.

WOOD BLOCK FLOORS



SCHOOL ADMINISTRATORS AND ARCHITECTS ARE FULL OF QUESTIONS

AMERICAN SCHOOL AND UNIVERSITY IS FULL OF ANSWERS

Are you planning a new school ning, design, finance tem or college isn't? Take a tour through 40 pages of illustraschools, visiting every nock and cranny, indoors and out, gath-ering practical ideas and inspirations for your own projects. And this graphic presentation is only one of 65 articles dealing with all phases of school and

The ideas, suggestions, case histories and planning techniques presented in this new 27th Annual reference volume will help you do an outstanding your community. AS&U brings hinking and experience availnance, operation and administration. You name your prob-lem. AS&U will point you to the

Schools today must be new tion section of AS&U brings you the catalogs of 337 manufac-

Whether it's ideas for your planning, or building products and classroom equipment you are seeking, AS&U is your first source of reference. The 1955-May we suggest that you make sure of your copy by ordering

1,212 Pages 651 Illustrations \$7.00 per copy

shool and University OURTH AVENUE, NEW YORK 16, N. Y.



1955-56

AMERICAN SCHOOL AND

UNIVERSITY

VOLUME 27

AMERICAN SCHOOL VALISHING CORP. are

you using

a

germicide

that

signals

when it stops

killing

Wescodyne

FIRST WIDE-RANGE "TAMED" IODINE GERMICIDE

amber color disappears as germicidal power is exhausted



NONSELECTIVE KILL

Exceptionally wide range effectiveness against: bacteria, viruses, fungi, yeasts and other pathogens.



TRIPLES KILL CAPACITY

Germicidal capacity is three to four times that of other germicides as tested on successive kills of seven common organisms.



POWERFUL DETERGENT

Provides amazing cleaning action as it disinfects. Does both in a single operation.

A time and labor saver.



NONSTAINING, NONIRRITATING, NONTOXIC

No skin irritation. No staining of hands, equipment, or surfaces. Absolutely safe when used as directed.



COSTS LESS

It's inexpensive because so little does so much. The usual recommended dilution of 3 oz. to 5 gallons of water (75 ppm available iodine) costs less than 2¢ per gallon.

WESCODYNE is recommended for almost any disinfecting procedure or hospital housekeeping. Unaffected by hard or cold water. Leaves no "hospital smell," Write for full report containing toxicological and microbiological data.



Write Hospital Division

Wescodyne

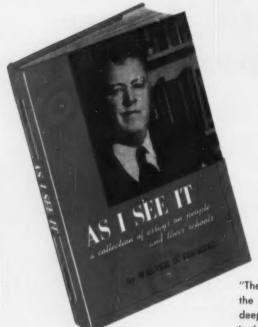
FIRST WIDE-RANGE "TAMED" IODINE GERMICIDE



Dept. SE, 42-16 West St., Long Island City, N. Y.

AS I SEE IT

Share AS with us...



Price \$2.50

...and with your colleagues

The best of Walter D. Cocking is in this book-the insights, understanding and lift for the human spirit that lead Dean Francis S. Chase, Chairman of the Department of Education of the University of Chicago. to write:

"These essays are windows into the mind of one of the most widely experienced, keenly observant and deeply reflective of our educational leaders. Dr. Cocking's observations are moored securely to his faith in man, especially young people, his faith in the democratic organization of society, especially in America, and his faith in education."

As a member of our SCHOOL EXECUTIVE family of subscribers, you need no further introduction either to this magazine or to its editor. But, we believe you would welcome a copy of "As I See It" for your own professional library.

By arrangement with the Macmillan Company, publishers of "As I See It," we are happy to offer you a copy of this new book, together with the extension of your subscription for an additional twelve months-both for \$5.00-a substantial saving over their cost if purchased separately.

The list price of "AS I SEE IT" is \$2.50. An annual subscription to SCHOOL EXECUTIVE costs \$4.00. However, with your renewal or new subscription to the magazine you will receive twelve issues of SCHOOL EXECUTIVE plus a copy of "AS I SEE IT" for only \$5.00.

Address

(Zero) (State)

(City)

M-1055

what the citizen wants to know about education

The aim of the private school, writes Mr. Heely, is to train good brains and characters to think straight and, if possible, fast—and to exert themselves in the service of society.

The Case for Private Schools

By ALLAN V. HEELY

Head Master The Lawrenceville School Lawrenceville, New Jersey

A good many Americans take the view that any school conducted under private auspices is by definition undemocratic. By definition, however, "private" is merely the opposite of "public," as "in" is the opposite of "out." Neither distinction implies political connotations.

Private schools are supported voluntarily by individuals exercising their right to give their children the kind of education they prefer. Public schools are supported by all taxpayers by law, including those who send their children to private schools.

But to the extremist, a school whose facilities are not available to everyone who wants them is discriminatory and subject to condemnation. Now, a service which is open to everyone on the same terms is obviously democratic; but it is by no means better or more admirable for that reason.

Given sufficient means and a free choice, a man will patronize a public clinic not because it is democratic, but only because it offers a service better than his purse can buy. It is sound American doctrine that a man is similarly free to choose whatever school he pleases for his children and for whatever reason, regardless of whether his reason seems good or bad to anybody else, or whether he prefers a good school or a poor one.

It is essential to our purposes to preserve that freedom; to see to it that in a democracy men and women with ideas on education shall be free to organize them in a corporate project, just as they may in any other field of endeavor. This freedom is so vitally important that it is the only justifi-

cation needed for the right of the private school to exist in a democratic state.

The more rabid opponents of the private school permit the inference that a poor public school is more democratic than a good private school, a view which I should suppose would give comfort



The public school has seen children of all backgrounds sitting together in the class-room. But education for democracy involves much more than rubbing shoulders.

to no one. For it leaves quality as a factor in democratic education quite out of the picture.

Actually schools, whether public or private, can justify themselves only by the soundness of their standards and by the degree to which they realize them. A school whose purposes are commendable, but whose standards of performance are lax, is simply a poor school, and there is no excuse for it.

Public schools take children of all creeds, races, colors, abilities, economic and social backgrounds, mix them up together, and make them rub shoulders with each other. It has been a magnificent achievement, quite beyond the capacity of private schools to undertake. But education is more than rubbing shoulders.

The objective of American public education is

to give every child an opportunity for the full development of his individual capacities. The objective is achieved only when these capacities are in fact fully developed. In some public schools the objective is substantially realized. In others it is realized imperfectly or barely approached.

It is this measurement, rather than merely the



All schools, public and private, should recognize their obligation to enhance the moral stature of their students as well as to refine their academic skills.

practice of a non-discriminatory admissions policy, which determines not, to be sure, whether a public school may be certified as democratic, but whether, in the actual advancement of our national educational purposes, it is really any good or not.

The same observations apply with equal force, of course, to private schools. They are good or bad not by reason of who attends them or who pays for them, but in the degree to which their stated objectives are on a high level and are consonant with American democratic ideals; and particularly in the degree to which their objectives are in fact realized.

Bad schools are an extravagance which the country cannot afford; and it makes no difference whether they are public or private schools. A definition of the ends of democratic education which does not match purpose against performance is scarcely adequate to the country's needs.

Freedom of access, therefore, is not by any means the only measure of a school's democracy. It must be measured also by the degree to which democratic principles and practices prevail in the life of the school.

It ought to surprise no one that this atmosphere has been secured at times in private schools as well as public, or that, in other instances, both types of schools have fallen short. For the enemies of democracy are hatred and prejudice and ignorance and fear and greed; and these unlovely

passions are inherent not in institutions but in men and women.

Diversity of race and color and creed, therefore, does not itself secure, or even make more likely, freedom from disrupting influences. Fascism, Communism, Ku-Kluxism, Anti-Semitism, and Jim Crowism are no respecters of persons, but afflict indiscriminately the adult population, without reference to the sort of school they have attended.

In consequence, there is no basis for the generalization that the way of life in public schools is inherently more democratic than that in private schools. The degree of democracy differs among individual schools, not between kinds of schools.

You can find private schools in which members of any race or creed are accepted unreservedly on their merits; and public schools, in the North as well as the South, in which Negroes are segregated.

If any school, therefore, whether public or private, hopes to offer a scheme of life based firmly on democratic principles and practices, it must meet certain stipulations. It must be open, of course, to every qualified person who wants to attend it. Its course of study must be responsive to the needs, purposes, and capacities of its students, and it must recognize its obligation to en-



The independence of the private school permits operation without interference from special political, professional or personal interests.

hance their moral stature as well as to refine their skills.

Whatever the content of the curriculum, the standard of accomplishment must stretch the powers of the students. The school must make possible the full extension of individual abilities. And its social atmosphere must reflect respect for personality, with all its faults and virtues.

In taking its part in the advancement of this process, the private school is humbly grateful for the fruits of its independence: for its freedom to decide whom to teach, who shall teach, and what shall be taught, unhampered by the inter-

ference and the impositions of politics, entrenched professional interests, or lunatic fringes of the right and left.

But it does not regard its privileges complacently. It recognizes the obligations and responsibilities which its freedom imposes. The aim of the private school should be to train good brains and good characters to think straight and, if possible, fast; and also to exert themselves in the service of society.

Today in America the private school is asking itself some very important questions. If it asks the right ones and gets the right answers, the

effect should be salutary. For the private school enjoys the peculiar advantage that it can be as good as it wants to be, if it can find out what that is

It regards its function as consistent with and complementary to the function of public education. It does not hold that the two functions are the same or that the private school duplicates the work of the public school. It does not think one kind of school is better than the other. It applauds diversity in schools. And beneath everything else, it feels the necessity of a sense of partnership in a great profession.

Teachers' Salaries and the Cost of Living

by HAROLD F. CLARK

Economic Analyst, Teachers College, Columbia University

The index of real wages of teachers showed a very sharp rise during the month of September. The index in September was 189.3 (1989=100). During August it was 131.7.

The month of September showed a substantial rise in the average teacher's salary. The average rise amounts to some \$200 per year. If all other salaries were stationary, this would represent a very great gain for teachers. However, the increase in many other occupations is greater than this rise for teachers.

In the automobile industry, the increase will probably run between \$400 and \$500 per year. In the steel industry, it could easily be between \$300 and \$400. In many sections of the chemical, oil and electrical equipment industries, it may be well over \$300 per year. In many of the building trades, the increases are going to run over \$300.

No one objects to the increases in other occupations. In fact, other things being equal, it would be advantageous for as many occupations as possible to have high incomes. If the increases in other occupations are higher than those in teachers' salaries, however, serious questions will be raised regarding the long term supply of teachers.

If teachers' salaries were already at an adequate level, it would make little difference if they fell behind for a year or two. Actually, however, it has been fifteen years since teachers' salaries resembled an adequate level, compared to other salaries.

There was a very sharp deterioration in the position of teachers during the war and immediately thereafter and, in general, teachers have not done any better than hold their own since that time. The average teacher's salary during the next twelve months will be somewhat less than the average wage of the gainfully employed worker.

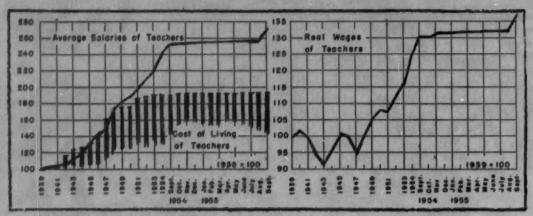
We have no reason to assume that the public would like its teachers picked from the bottom half of the population. The salary schedule now paid in most communities will cause this to happen ultimately unless there are substantial changes.

There will be a net increase in the school enrollment of the nation of almost 1,000,000 students. This will necessitate the employment of at least 30,000 new teachers. This figure, of course, is in addition to the 90,000 or 100,000 teachers that must be replaced for reasons like retirement, changing jobs, etc.

Present salary scales are not high enough

The present salary schedules are not adequate to produce enough high-grade people to fill all these positions It is perfectly clear that many thousands of these teaching jobs will have to be filled with inadequately trained, or untrained, persons. There are only two or three situations where teachers' salaries are adequate to hire reasonably competent persons; fortunately, one of these places is at the beginning level.

The beginning salary of teachers in a large fraction of American communities will be between \$3,000 and \$3,600. This is a completely competitive figure, even for very able young women, college graduates, starting to work. If this situation is exploited properly, it might conceivably be possible to fill most of the positions with able young persons. The complication arises over the fact that most of these candidates know that future salaries will be



The month of September saw the index of real wages of teachers rise sharply over the previous month. In September the index stood at 139.3, a full 7.6 points above August's reading of 131.7.

inadequate if they stay in teaching.

On the other hand, tens of thousands of them will leave after a relatively short period in teaching. For these, the salary level is adequate and comparable to what they would make in almost any other occupation. On a short-term basis, then, if a school system wants to obtain a high quality of teachers for most of its jobs, it probably should make unusual efforts to obtain able women who may not necessarily plan to make a life career of teaching. Another alternative is to drop greatly the level of ability required in the persons hired.

Other sources of top quality teachers

There are a few other alternative sources of relatively high-grade people available at the going salaries for teachers. There has been a great deal of discussion on bringing older married women back to teaching. This suggestion has a sound economic basis. Many of these women can make as much money teaching school as they can in alternative occupations open to them.

This probably means that most communities have a relatively sizable group of able persons who can be brought back into the school system at the going salary rates. They, almost certainly, should be the next large group that is systematically developed in dealing with the teacher shortage.

In the light of the total figures available, however, American communities certainly should look forward to some more drastic solutions to the teacher shortage problem. At present, our prospective salaries of teachers during the next decade offer little promise that a sufficient number of high-grade people can be obtained to fill the hundreds of thousands of new teaching jobs that must be filled.

Some ways will have to be found to use teachers more efficiently than they are now being used. This means, on the average, that teachers probably will have to handle more students. The only alternative seems to be a great increase in the number of teachers. No such increase is available without lowering quality.

Theoretically, the problem might be solved by a substantial rise in teachers' salaries. Nothing has happened, however, during the last ten years that indicates the American people are willing to approve anything like the increase that will be necessary.

Seemingly, the very best we can hope for, salary-wise, is that teachers' salaries might be moved back to the relative position they held in 1939. Even this is going to be extraordinarily difficult and little or no progress has been made along this line during the course of the past ten years. Teachers' salaries at the very best have barely held their own in relation to other occupations.

It would take a generation of teachers' salaries advancing more rapidly than other wages to get them back where they were half a generation ago. The entire situation regarding teachers' salaries is clearly one where American communities will have to systematically explore the supply of new teachers and will have to make greater efforts to obtain them than they ever have in the past.

Next Month: Recruiting Young People for Teaching-Richard C. Lonsdale

No. 132. Reprints in quantities of ten or more may be purchased from The School Executive, 470 Fourth Avenue, New York 16, New York. 10 copies for 1 months: \$1.00, for 12 months: \$10.00; 25 copies for 1 months: \$20.00; for 12 months: \$30.00; 100 copies for 1 months: \$3.00, for 12 months: \$30.00; 100 copies for 1 months: \$50.00, for 12 months: \$50.00.



molded plastic tableware has eye-appeal and keeps replacement costs

almost at the zero mark



- * break-resistant
- * stain-resistant
- * lightweight, quiet
- * cleans easily
- * speeds up service
- * stays new-looking longer
- * nests neatly
- * handsome maple color



FILL IN THIS COUPON

Keyes Fibre Sales Corporation, Dept. SE 420 Lexington Avenue, New York 17, N. Y.

Please send further information on KYS-ITE tableware and KYS-ITE molded plastic trays.

NAME	
NAME OF FIRM	
ADDRESS	

PITTSBURGH COLOR

Benefits Pupils of all Ages!



Reflected light is improved and at the same time an atmosphere of stimulating warmth and cheerfulness is provided by the use of more than one color in this classroom.

"COLOR DYNAMICS" is best and most economical painting method!" says school superintendent.

"The bright, pleasing colors have made a remarkable difference in the amount of light in our classrooms. This is quite important to the study and work habits of our papils and teachers. Patrons and visitors frequently compliment us on the pleasant changes COLOR DYNAMICS has effected. We have found this color plan as well as Pittsburgh Paints to be not only the best but also the most economical. Our experience has been so satisfactory we plan to continue this program in our school system."

MILTON GARRISON, Supt. Center Public Schools, Kansas City, Missouri. EXPERIENCE of educators in hundreds of schools and colleges has demonstrated that Pittsburgh COLOR DYNAMICS improves the academic grades and behavior ratings of students of all ages.

Most convincing evidence that color environment affects work and study habits is the intensive two-year study of the record of more than 2,500 pupils in Baltimore schools. This test reveals that learning is accelerated and behavior is improved in schools painted ac-

cording to the modern principles of COLOR DYNAMICS.

By painting school rooms with COLOR DYNAMICS you give them color arrangements in keeping with their design and their lighting. You also take into consideration the ages of the pupils who use these rooms and the work they do. You paint sunny effects into gloomy rooms and corridors. You bring cool relief into rooms that face the bright afternoon sun. Cold, unfriendly rooms appear cheerful and



PITTSBURGH

PITTSBURGH PLATE

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

DYNAMICS

Experience in hundreds of schools and colleges is convincing proof that planned color environment improves work and study habits.



In this vocational classroom, an industrial area has been simulated. Machines, walls and ceilings have been painted with eye-rest colors that also provide bright and cheerful surroundings.

inviting. Small, stuffy rooms are made to seem spacious and airy.

By such purposeful use of color you can lessen eye strain and stimulate concentration. You can give your pupils more cheerful surroundings. The pride they'll take in their improved environment will often simplify housekeeping problems and discourage vandalism.

Why not try COLOR DYNAM-ICS next time you paint—and see the difference it makes in performance and behavior traits.

PAINTS

Only a few of the Many Schools Painted the COLOR DYNAMICS Way!

MacAlister College, St. Paul, Minn.
Ball State Teachers' College, Muncie, Ind.
Georgia Teachers' College, Savannah, Ga.
Hendrix College, Little Rock, Ark.
Monessen High School, Monessen, Pa.
Monte Vista High School, Monessen, Pa.
Midway High School, Washington, Pa.
Snyder High School, Snyder, Tex.
Durand, School, Pt. Pleasant, N.Y.
St. Johnsville Central School, Utics, N.Y.
Anthony Elementary School, Anthony, N.M.
Kent Elementary School, Kent, Ohio

Let us make a FREE Engineered Color Study of Your School

We'll be glad to send you our profusely illustrated book containing scores of suggestions how to use COLOR DYNAMICS in school painting. Or we'll be glad to make an engineered color study of your school, or any part of it, without cost or obligation. Call your nearest Pittsburgh Plate Glass Company branch and arrange to have one of our representatives see you at your convenience. Or mail this coupon.

Pittaburgh Plate Glass Co., Paint Div. Dept. SE-105, Pittaburgh 22, Pa.

Please send me a FREE copy of your booklet "Color Dynamics for Grade Schools, High Schools and Colleges." Please have representative call for Color Dynamics Survey without obligation on our part.

Name	
Street	
City	

GLASS COMPANY

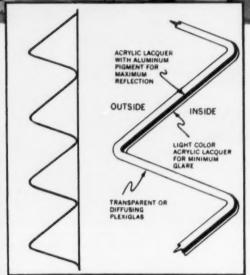


New way to control Sun Glare— use daylight louver panels of PLEXIGLAS

Daylight Louver Panels, formed from Plexiclas acrylic plastic, provide nearly optimum visual environment in daylighting systems. As shown in the cross-section drawing at the right, they combine opaque louver slats, light transmission and weather closure in one continuous surface. The design results in—

- Effective shielding from sun and sky glare.
- Improved distribution of daylight—an "indirect daylighting" system for evenly distributed diffused daylight.
- Reduction of solar heat gain inside buildings through reflection of a high proportion of direct sunlight striking the window area.

The daylight louver panel system is based on the formability, strength and weather-resistance of PLEXIGLAS, and was developed at the Daylighting Laboratory of Rohm & Haas Company. The names of suppliers of stock and custom-formed panels, and our new brochure—"Daylight Control with PLEXIGLAS"—containing data and recommendations on the use of daylight louver panels, are available on request.



Cross-section of a daylight louver panel, and close-up of one louver.



Chemicals for Industry

ROHM & HAAS COMPANY

Washington Square, Philadelphia 5, Pa.

Representatives in principal foreign countries

PLEXICLAS is a trademark, Reg. U.S. Pas. Off and in other principal countries in the Western Hemisphere

Conadian distributor Crystal Glass & Plastics, Ltd., 130 Queen's Quay at Jarvis Street, Toronto, Ontario, Canada

26



Turn the dial . . . get the clearest, fastest most convenient copy of anything. It's the new all electric Apeco Dial-A-Matic Auto-Stat with revolutionary finger tip dial control. It's light weight for easy portability . . . compact to fit on the corner of any desk and is styled in polished and satin finish

stainless steel. It copies any original up to 15" wide, any length or color on opaque or transparent paper—printed on one or both sides. The Apeco Dial-A-Matic Auto-Stat offers hundreds of money and time saving uses at a price well within the budget of even the smallest firm.

Delivered with Lifetime Service Guarantee

Have You Read This NEW BOOK?



Mail This
AIR MAIL

Postage Paid Card

For your FREE BOOK

(See other side)

AMERICAN PHOTOCOPY EQUIPMENT CO.
Chicago 26, III.

AMERICAN PHOTOCOPY EQUIPMENT CO. (Days. 38-105) 1920 West Potorson Ave.

Chicago 26, III.

Rush me, without obligation, your free book on new Apeco Dial-A-Matic Auto-Stat copying. I understand this factual report will show me how I can increase the efficiency of my business, speed work output.

ME

FIRM____ADDRESS.

ADDRESS.....

CITY____STATE_ in Canada: Apeco of Canada, Ltd., 134 Park Lawn Rd. Toronto, Ont. COPY ANYTHING SERVICES ANY THE SERVICES AND THE SERVICES

This Card Tears Out Use it to get Your FREE Book!

all-purpose copy maker

the brand new.

APECO / State

Easiest Way Ever
To Speed Up Routine
Office Copying!

CONTRACTS

COPY ANYTHING

INVOICES

BLUE PRINTS

Copy Anything easiest way ever New FREE BOOK tells you how!

Your free copy of this new book is jammedpacked with pictures and details about this revolutionary new copying method. Tells what Apeco Dial-A-Matic Auto-Stat copies are and how you can use these copies in your business. You as well as every executive member of your staff, should read this worthwhile informative. factual report on this important new copying invention. You will find out how you can save time and money by speeding production, by cutting costly office paper work, by expediting shipping and receiving and hundreds of other ways to increase the efficiency of your business.

FIRST CLASS

Permit No. 26670 (Sec. 34.9 P.L.&R.) Chicago 26, III.

Via Air Mail

BUSINESS REPLY CARD
No postage stamp necessary If mailed in the United States

5c-Postage will be paid by-

AMERICAN PHOTOCOPY EQUIPMENT CO.

1920 W. Peterson Ave. Chicago 26, III.



Use this Tearout postage paid air mail card.

MAIL CARD TODAY!
for free book



Vew IN SAFETY: Many new safety features such as fully enclosed spindle that has side opening for easy changeover, enclosed belt and pulley guard, safety-recessed push button starter up front available as an accessory make the new Delta 14" drill press safer than ever for student use.

for faster, more accurate depth of penetration readings
. . . Self-locking Depth Stop with micrometer settings calibrated in steps of .002" . . . Tilting Table with positive stops and calibrated scale . . . those are just a few of the new features which make it so easy to do precision work on the new Delta 14" drill press.

DELTA QUALITY POWER TOOLS

Another Product by ROCKWELL





DELTA QUALITY COSTS NO MORE

New IN VERSATILITY: You can teach countless operations on the new 14" Delta—drilling, counterboring, tapping, routing, shaping and dozens of other jobs. You can use it on wood, metal, plastics. In fact, you'll find the new Delta 14" Drill Press one of the most useful and versatile teaching aids in your shop.

Remember, ALL Delta Tools PROVIDE DOUBLY-VALUABLE TRAINING because they are the SAME tools with which many of your students will earn their living after leaving school!

See H Now. There's so much that's new and better about the new Delta 14" Drill Press that you've got to see it to appreciate it. Call your Delta Dealer for a demonstration (he's listed in the classified pages of your phone book under "TOOLS" or "MACHINERY") or send the coupon.

	name of the nearest Del	ta Dealer who has
the new 14" Delta D	Irill Press on display.	
	mplete catalog informat	ion on new Della
14" Drill Press.		
14" Drill Press.	1	Title
	1	Title
Name		litle



FENESTRA TROFFER-ACOUSTICAL PANEL SYSTEM CUTS COST OF REINFORCED CONCRETE SCHOOL CONSTRUCTION

Multi-purpose Steel Panels provide long-span forms for concrete joists plus acoustical ceilings and recessed lighting troffers built right in!

Multi-purpose is the key to economy in school construction. The NEW Fenestra* Troffer-Acoustical Panels (TAC Panels, for short) are designed for multi-purpose use of materials and construction labor. They permit you to have acoustical treatment and lighting-features that usually require extra time and labor-built right in the structure itself!

Money is saved because 3 expensive building materials are wrapped up in these economical building panels: (1) the forms for concrete joist construction, (2) metal pan acoustical ceilings, and (3) recessed lighting troffers.

Time is saved because the structural floor for the rooms above and the acoustical ceiling and lighting system for the rooms below are completed at the same time . . . with only paint, finished flooring and installation of fluorescent fixtures to be done after the concrete has cured.

And, this new building system gives you betterlooking, better-lighted classrooms that are easier to maintain, year after year. The ceilings can be washed or repainted as often as needed, without affecting the acoustical treatment. There is no hanging ceiling or "stuck on" acoustical material to be damaged or replaced.

Investigate the NEW Fenestra TAC Panel System now. Even if you have plans on the drawing board, they may easily be adapted to use it.

Call your local Fenestra representative or write today for your copy of the new brochure, Fenestra TAC Panel System. Detroit Steel Products Co., Dept. SE-10, 3431 Griffin Street, Detroit 11, Michigan.

Architectural, Residential and Industrial Windows, Metal Building Panels · Electrifloort, Roof Deck · Hollow Metal Swing and Slide Doors



Fenestra

ROFFER-ACOUSTICAL BUILDING PANELS

Patents applied for

THE SCHOOL EXECUTIVE

American Seating Universal Desks





No. 536 Universal "Ten-Twenty" Deak with exclusive 3-position top; 10° and 20° slopes for reading, writing, art, work-plus level top for manipulative work, group discussions. Automatic fore-and-alt seat adjustment.

American Seating Universal Desks, with their superior functional advantages, now give you even greater value with the first and only metal-and-plastic top, designed and manufactured by American expressly for classroom use.

The new top is stronger, yet lighter in weight than ordinary plastic-covered tops. The die-formed steel frame supports the plastic work surface, which ends the weaknesses of wood desk-tops and adds years of "wear-life" to your school desks. The satinsmooth surface has a color-fast birch-grain pattern, uniform light reflectance of 45%.

Acontinuous band of hard-aluminum alloy protects edges.

These desks assure the best service with maximum aid to teaching and learning, while conserving valuable floor space.

Typical advantages are the long-life die-formed construction; maximum desk-top working surface; 45° left-andright seat swivel that minimizes room needed for getting in or out; cradleform sitting comfort; self-adjusting lower back rail; roomy, one-piece steel book-box; and wide-range adjustability of seat and desk by never-fail wrap-around clamps.

No. 534 Universal Lifting-Lid Desk

One-piece "no-elam" top affords completely usable working surface at 10° slope or level; lifts for full access to book-box. Has pencil tray on top as well as inside deak top.

AMERICAN BODIFORM AUDITORIUM CHAIRS

Full-upholatered—the ultimate in beauty, comfort, durability and acoustical benefit. With or without folding tablet-arm.

Send for illustrated folder on American Universal Deaks describing the new metal-and-plastic deak-top.

American Seating Company

WORLD'S LEADER IN PUBLIC SEATING - GRAMO RAPIDS 2, INCOMEAN BRANCH OFFICES AND DISTRIBUTORS IN PRINCIPAL CITIES MANUFACTURERS OF SCHOOL, AUDITORIUM, THEATRE, CHURCH, TRANSPORTATION, STADIUM SEATING, AND FOLDING CHAIRS.



who

Alcoa Building, (left), Pittsburgh, Pennsylvania Architects: Harrison & Abramovitz Associate Architects: Mitchell & Ritchey Altenhof & Bown General Contractor: George A. Fuller Company Date of Adlake Window order: January 25, 1951

North Central Home Office Prudential Insurance Company of America, Minneapolis, Minnesota Architects and Engineers: Magney, Tusler & Setter General Contractor: C. F. Haglin & Son's Co. Date of Adlake Window order: October 19, 1953

Prudential Insurance Company of America, Chicago, Illinois Articlets: Naess & Murphy General Contractor: George A. Fuller Company Date of Adlake Window order: November 12, 1953

Shelby County Hospital, Shelbyville, Kentucky Architects: Nevin & Morgan General Contractor: Otho Tapp Date of Adlake Window order: June 24, 1952

City County Building, Detroit, Michigan Architects: Harley, Ellington & Day General Contractor: Bryant & Detwiler Date of Adlake Window order: January 12, 1953

Freeport Motor Casualty Company, Freeport, III. Engineers and Contractors: The Austin Company Date of Adlake Window order: June 2, 1952

East Unit, Baptist Memorial Hospital, Memphis, Tennessee Architects: Office of Walk C. Jones, Jr. Consulting Architects: Samuel Hannaford & Sons General Contractor: Harmon Construction Company Date of Adlake Window order: June 23, 1953

Rockford Memorial Hospital, (right), Rockford, III. Architects: Hubbard & Hyland Perkins & Will General Contractor: Security Building Company Date of Adlake Window order: December 26, 1951

originated aluminum reversible windows?

Anyone can claim to-but ADLAKE can show installations sold as early as these!

There's a lot of talk these days about companies "developing" aluminum reversible windows—and we're rather flattered. For we like to think the sudden rash of "new" windows proves that a lot of people looked at the Adlake Aluminum Reversible Windows (that we sold 'way back in January, 1951) and liked what they saw.

Take a look yourself—at the outstanding buildings listed here. They're all equipped with Adlake Aluminum Reversible Windows. (And just to keep the records all straight, we've put in the dates when the orders were placed with Adlake for the windows.)

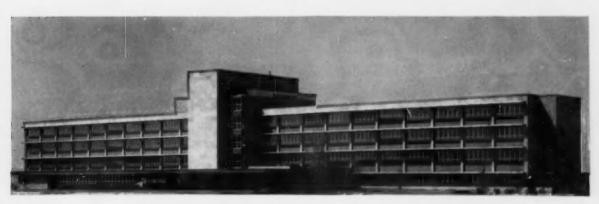
As with all Adlake products, these windows had to

undergo extensive testing before they were offered for sale, so the windows were designed and developed several years before the first order was placed. We believe Adlake was first with aluminum reversible windows, and until we see some installations that were sold earlier, we'll keep right on thinking so!

THE Adams & Westlake COMPANY

Established 1857 • ELKHART, INDIANA New York • Chicago







All of YOUR cleaning is EASY - and OH-SO-FAST when the

> TORNADO. TWINS

> > GO TO WORK





NOISELESS Wet or Dry Vacuum

TORNADO.

Here's the newest development in fast, casy, powerful, yet quiet vacuum cleaning for all commercial and institutional applications. The Tornado Model 240 Noiseless vacuum cleaner, with suction speeds above 320 M.P.H., is the most powerful noiseless cleaner you can use. With its 1 H.P. by-pass type motor it can pick up water or scrubbing solutions equally as well as dirt, dust or lint. A Tornado cleaning engineer will be glad to give you an "on-the-spot" demonstration.



TORNADO.

Floor Scrubbing and **Polishing Machines**

An all-purpose floor machine with featherweight touch for scrubbing or finest polishing jobs. Dual switch controls, left hand switch also controls solution flow from tank. Available with or without solution tank. Self-retracting, non-marking neoprene wheels and bumper for safety. Available in 14", 16" or 18" brush sizes.



Tornada Noiseless picks up scrubbing solutionsleaves floors bone dry.

Tornado Noiseless can be used without disturbance at any time of day or night.

WRITE FOR LITERATURE

TODAY!

Tornado Noiseless Catalog No. 707

Tornado Floor Machine Catalog No. 619

THE FAMOUS FLOOR MACHINE WITH PATENTED BRUSH COUPLER

Brush couples by merely rolling machine over the brush and starting the motor. To remove brush, just flick with toe or finger and brush drops off.



BREUER ELECTRIC MFG. CO.

5088 North Ravenswood Avenue . Chicago 40, Illinois



THE LOW PRICE WILL SURPRISE YOU.
TRIPLE THE LIFE OF YOUR DESKS
AND TABLES AND SAVE MONEY TOO!



Your wood tops are unsightly, unusable, although your desks are structurally strong and good for years to come



With new Mark Price Plastic replacement tops—you have trebled the life of your desks and tables at a low, low cost. YOUR OWN MAINTENANCE MEN CAN IN-STALL THE NEW MARK PRICE TOPS IN A MATTER OF MINUTES WITH NO SPLITTING AND FAR GREATER SCREW HOLDING POWER.



1501 West 25th Street Cleveland 13, Ohio HERE'S WHAT MIRACLE PLASTICS AND MODERN INDUSTRY GIVES YOU.

MARDWOOD PLYWOOD CORE—Hot press bonded, with colorless Guaranteed type adhesive. Greater Strength—dimensional stability—freedom from warning

RICHWOOD MELAMINE PLASTIC SURFACE-

Blond Rotary cut Birch Grain. Virtually marproof, stainproof, scratchproof. Complies beyond N.E.M.A. specifications for decorative plastic laminates—discourages both intentional and unintentional damage by students.

WRITE, WIRE OR PHONE COLLECT!

	25th Street 13, Ohio			
Please Quote	Prices on New I	lastic Tops as	follows:	
No. of Tops				
Desk	Tops, size			
Cofe	eria Table Tops,	sixe		
Labo	ratory Yops, size.			
Table	f Arm Tops, size			
Kinde	rgarten Tops, siz-	-		

October, 1955



he dropped in for a minute

and stayed for hours



He wanted a fact. And he gained a whole new experience. He was interested in "stuff about the moon growing brighter after the sun sets." I helped him find the article he wanted in Volume 10 of The Book of Knowledge. He found his fact. But then, he went on reading about the moon and the earth and the tides. He didn't know it, but he was being intrigued by the skillful and unique arrangement of The Book of Knowledge which leads the child eagerly from page to page.

As I watched him-past closing time-still engrossed in his reading, I knew I'd soon have to remind him of the hour. But, meanwhile, I couldn't help a satisfied smile at the new experience he had gained: the experience of reading, reading that opens vistas to the mind. That afternoon he had entered the magic world of written ideas and I knew that the chances were heavily in favor of his being a reader from then on. From this experience with The Book of Knowledge he could well go on to become the happiest and most successful of human beings-a well-read man.

The modern Book of Knowledge is 19 separate volumes of fascinating reading, plus a fully cross-indexed 20th volume. The new 1955 edition has been importantly revised and newly laid out. Big,

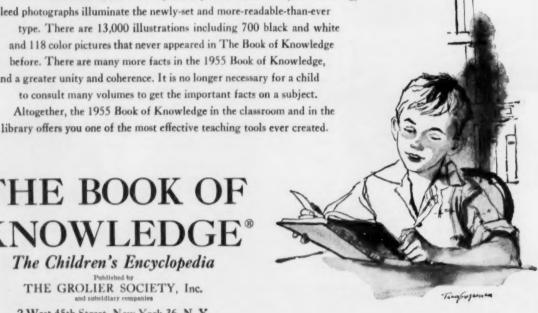
bleed photographs illuminate the newly-set and more-readable-than-ever type. There are 13,000 illustrations including 700 black and white and 118 color pictures that never appeared in The Book of Knowledge before. There are many more facts in the 1955 Book of Knowledge, and a greater unity and coherence. It is no longer necessary for a child to consult many volumes to get the important facts on a subject. Altogether, the 1955 Book of Knowledge in the classroom and in the

THE BOOK OF **KNOWLEDGE®**

The Children's Encyclopedia

THE GROLIER SOCIETY, Inc.

2 West 45th Street, New York 36, N. Y.



A PACE-SETTER

ONLY WEAR-EVER

OFFERS YOU

OPEN BEAD

IN EASY-TO-CLEAN, EASY-TO-KEEP CLEAN ALUMINUM COOKING UTENSILS



WEAR · EVER ALLENDARINAM TRACE AND TRACE AND

THE ALUMINUM COOKING UTENSIL CO., INC. WEAR-EVER BLDG., NEW KENSINGTON, PA.

See our full-line display, Booth 25, ASFSA Show, Oct. 31-Nev. 3 The Aluminum Cooking Utensil Company, Inc. 6610 Wear-Ever Bldg., New Kensington, Pa.

GENTLEMEN: I'd like to know more about your full utensil line.

Send me your catalog. Have your representative see me.

Terro

Fill in, clip to your letterhead and mail today.

NEW ITEM! Wear-Ever's new Nickel Scouring Cloth. Won't scratch, won't mar, far outlasts ordinary scouring cloths. At your dealer's.





Be sure it is seen . . . make it sparkle!

We put our light in the best schools, theatres, hotels, arenas and clubs.

Strong Spotlights project a brilliant, flickerless spot—sharp edged from head to flood.

Two-element variable focal length objective lens system. Horizontal masking control angles 45° in each direction.

Fast operating 6-slide color boomerang.

Plug into any 110-volt outlet. Fully automatic.

TROUPER
ARC SPOTLIGHT
with adjustable self-regulating
transformer in base.



THE STRONG ELECTRIC CORPORATION

114 CITY PARK AVENUE

TOLEDO 2, OHIO

Please send free literature and prices on Strong Spotlights.

NAME

STREET

CITY AND STATE

TROUPERETTE INCANDESCENT SPOTLIGHT

A SUBSIDIARY OF GENERAL PRECISION EQUIPMENT CORPORATION





LOOK ALIKES?

Here's the ///SIDE story...in a nutshell

Most school furniture does look alike! However, Westmoreland gives you unseen value which has earned a reputation for quality, reliability, integrity and service.

Classrooms today demand a flexibility of arrangement. In Westmorelands open-front desk and matching chairs, you find a unit designed to meet every specification. Westmoreland is posture-engineered for student comfort and correct seating . . . These units are available with northern solid hardwood maple tops, seats and backs or with plywood tops, seats and backs, or plastic tops.

All frames are Westmoreland tubular steel, guaranteeing long-life and low maintenance costs.

Your Choice of striking colors that harmonize with your school color scheme, coral, blue, taupe, turquoise and satin chrome.

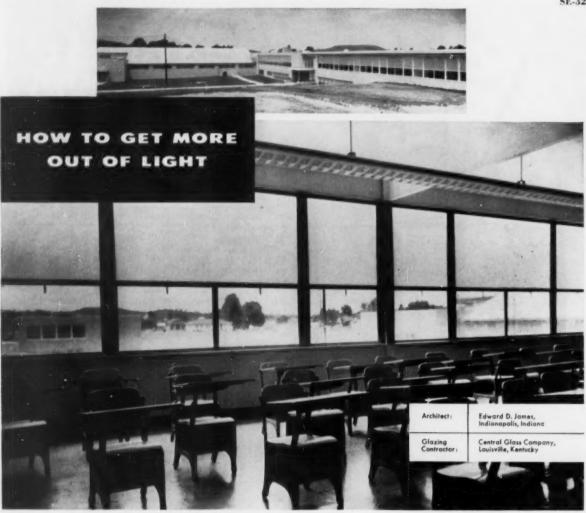






Division of Westmoreland Metal Mfg. Co. Milnor Street and Bleigh Ave., Philadelphia 35, Pa.

Open Front and Lifting Lid Desks. Chairs and Tablet Arm Desks. Double Desks. Moveable Desks. Folding Chairs.



TRANSLUCENT, DIFFUSING GLASS FLOODS SCHOOL ROOMS WITH HIGH QUALITY DAYLIGHTING

In the Corydon Central High School, Corydon, Indiana, the architect matched the glass with daylighting requirements. To attain maximum light distribution, Mississippi's ½" Pentecor, Glare Reduced, on the pattern side only, was installed with the smooth side out and the prisms in horizontal position. Pentecor, a popular pattern with leading school designers, diverts softened, diffused daylight deep into interiors, floods classrooms with plenty of undistorted, natural illumination.

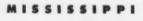
Translucent, light diffusing glass makes classrooms seem larger, friendlier. Students feel better, work better, when they see better.

Specify Mississippi Glass when you build or remodel. Available everywhere in a wide variety of patterns and surface finishes through leading distributors of quality glass.

Mississippi Sends Glass To Class

Mississippi maintains an experimental school building on factory grounds for the study of school daylighting. Take advantage of the company's wide experience. Our technicians are ready to help you with every daylighting problem.

Write today for free literature, Address Dept. 16.





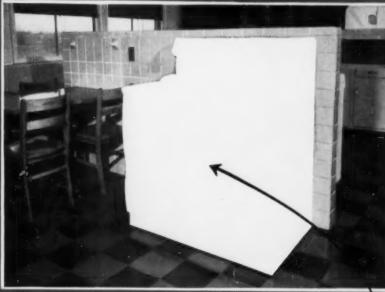


NEW YORK - CHICAGO PULLERTON, CALIFORNIA

WORLD'S LARGEST MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS



from this Lab?



ELECTRIC Ranges to teach modern cooking!

To be complete, your curriculum must anticipate student needs—and today the need is for *Electric* Range cooking instruction. The number of *Electric* Ranges in American homes has more than *trebled* during the past 9 years—more than twelve million are in use. Homemakers have learned that this type of range offers clean cooking as well as ease of operation—and a cool kitchen, too. Obviously, students must learn to use an *Electric* Range—and to teach its use, you must have modern *Electric* Ranges in your school's home economics laboratory.

Information on how to provide your school with modern, automatic *Electric* Ranges may be easily obtained from your electric light and power company or electric appliance dealer.

Floor Plan Booklet—This booklet can help you, whether you're installing new ranges, remedeling the school's home economics laboratory, or planning a new school building. It serves to crystallize

your thinking on what your own laboratory should include, provides ideas on layout and arrangement based on what has been done in other schools. Mail the coupon for your FREE copy!



ELECTRIC RANGE SECTION

National Electrical Manufacturers Association 155 East 44th Street, New York 17, N. Y.

ADMIRAL - AMERICAN KITCHENS - CROSLEY
FRIGIDAIRE - GENERAL ELECTRIC - GLOBE - HOTPOINT
KELVINATOR - MAGIC CHEF - MONARCH - NORGE

PHILCO • RCA ESTATE • STIGLITZ INFRA-AIRE
TAPPAN • WESTINGHOUSE

ELECTRIC RANGE SECTION

National Electrical Manufacturers Association 155 East 44th Street, Dept.SE-10-55, New York 17, N. Y.

Please send me, absolutely FREE, copy of "PLANNING THE HOME ECONOMICS LABORATORY."

We have (total number)____students in ou home economics classes.



Solve even special heating and with standard Trane

...a <u>complete</u> line ranging from the KB Unit Ventilator to Wall Line Convectors...Unit Heaters

Whatever your special problem—from preventing icy drafts along walls of windows to freshening the locker rooms—chances are you can get the exact equipment you need without having to pay "custom-built" prices.

From the complete Trane line headed by the Trane KB Unit Ventilator pictured above, you can usually select *standard* Trane products engineered and sized to handle even your *special* heating and ventilating problems.

You can afford better equipment, you can afford TRANE matched equipment, because this way you





ventilating problems products...

do NOT have to pay for specially-built equipment.

And, of course, buying from one reliable source
pin-points responsibility, saves time and simplifies
maintenance.

The easy way to have the finest equipment at the lowest possible cost is to specify TRANE all the way.

Ask your local architect, contractor or consulting engineer to contact his nearby Trane Sales Office, or write Trane, La Crosse, Wis.

TRANE

MANUFACTURING ENGINEERS

One source, one responsibility for: Air Conditioning • Heating • Ventilating Heat Transfer Equipment

The Trane Company, La Crosse, Wis. • Eastern Mfg. Div., Scranton, Pa. Trane Co. of Canada, Ltd., Toronto • 90 U.S. and 17 Canadian Offices

IN AUDITORIUMS standard TRANE Volume Ventilators blend outdoor air with room air, warm and distribute it overhead.



IN SWIMMING POOLS standard TRANE Wall-Fin surrounds occupied area with warmth, prevents drafts. (TRANE Torridors add tempered ventilation.)



IN ENTRYWAYS standard TRANE Force-Flo Heaters greet youngsters with warm welcome . . . blanket doors with heat to block cold air, stop drafts.



IN STAIRWAYS standard TRANE Convectors combine beauty with efficiency, fit where other types of units won't. Freestanding, recessed or wall-hung.



"Sure you can buy cheaper lockers, but you can't buy any made better than Medart!" STEEL LOCKERS



LOCKERS in all standard types and sizes, recessed and free-standing

BASKET SHELVING, permanent and portable, in all popular sizes.

Ask for Catalog

Equipped with a new type locking mechanism— Positive-Locking—Pre-Latching—Fool-Proof and Pilfer-Proof.

The ONLY locker with all the perfected features essential for maximum protection, long service and minimum maintenance.

SPECIFY the best, then INSIST on it!

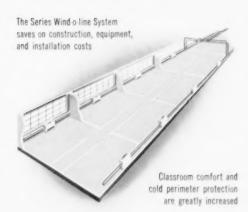
FRED MEDART PRODUCTS CO., INC. 3534 DeKeib St. . St. Louis 18, Mo.





The Nesbitt Package (Syncretizer with Wind o-line and Storage Cabinets) finished in one of the new Nesbitt School Colors

Never before such comfort with such economy



Better; costs less: Nesbitt Syncretizers and Wind-o-line Radiation serving groups of classrooms in series hot-water circuits. All the beauty and comfort of this classroom can be yours at savings of 20% or more as a result of this Nesbitt engineering development! The Series Wind-o-line System introduces a unit ventilator radiator that requires only one-third as much hot water as in a conventional system. This reduces the size of pipes and pumps, and permits the Wind-o-line tubing to serve as the supply and return piping for entire classroom wings-thus eliminating mains, costly pipe trenches, coverings, and runouts. And without the expense of additional equipment, Wind-o-line maintains overnight building temperatures. All these economies contribute toward a 20% reduction in construction, equipment, and installation costs. This Series Wind-o-line System means greater comfort, too! Cold wall protection is related to actual needs because system water temperature is varied by outdoor temperatures. If you are not yet familiar with this latest Nesbitt contribution to the reduction of school costs, ask your architect or engineer, or write for Publication 104.

AT NO EXTRA COST—SIX NEW SCHOOL COLORS AND HARDTOP SUNBOARDS . . . SEE NEXT PAGE



Nesbitt

SERIES WIND . O . LINE SYSTEM

John J. Nesbitt, Inc., Philadelphia 36, Pa. Sold also by American Blower Corporation.

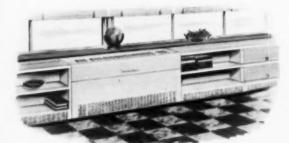
Menhitt NEW SCHOOL COLORS



School Green L.R.* 33.9%



School Tan L.R. 39.1%



One idea from the Nesbitt Color Selector, Publication 100-2



School Beige L.R. 37.5%



School Ivery L.R. 73.4%



School Gray L.R. 50.7%

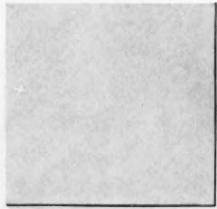


School Blue L.R. 40.4%

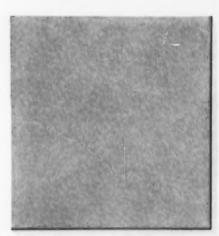
The six new school colors enhance the modern beauty and fabulous finish of Nesbitt classroom equipment . . . and the new laminated plastic hardtop for Nesbitt storage-cabinet sunboards multiplies the decorative possibilities.

Gray Myth

Neskitt NEW PLASTIC HARDTOP



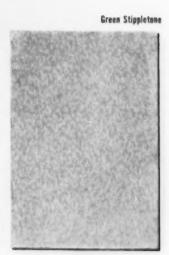
Cement Gray Stippletone



Beige Stippletone



Tan Irish Linen





"Should my parents choose my career? . . Should I go to college? . . Before or after I'm drafted?"

Teen-agers Ask for Help

by ALBERT M. LERCH

Director of Guidance Northampton Area Joint High School Northampton, Pennsylvania A FTER YEARS OF COUNSELING high school students, I am convinced that the adolescent period is the most critical and misunderstood time of our lives.

When we recognize the many problems that confront them, it is not surprising that some youngsters of that age should become juvenile delinquents. The uncertainties and fears that come with this period of growth may lead the adolescent into anti-social behavior unless he receives guidance and sympathy.

A teen-ager is confronted by two main obstacles. He is too young to be considered an adult and too old to be considered a child. He is expected, however, to act and understand as an adult and is admonished not to be childish when he doesn't "act his age." He is often criticized for his mistakes, ridiculed for his beliefs, scolded for his lack of appreciation, and scorned for his lack of respect and general indifference.

The teen-ager has many conflicts and problems which affect his behavior and attitudes and for which he seeks an answer. All too frequently it appears no one takes him seriously or cares about helping him find the answers. Many times his troubles are dismissed with a benign smile and a "Don't worry, it's not as serious as you make it sound."

When teen-agers come into my office to lay a problem on my desk, their faces may wear expressions of shyness, anxiety, fear, hope, confusion, despair, grief or shock.

"I hope you won't laugh"

They will introduce their problems in various ways: "I hope you won't laugh when you hear my problem." "You helped others, I am sure you can help me." "I trust you, that's why I am telling you." "I just had to tell someone." "I just don't know what to do any more, I need help hadly."

Here is a boy who is deeply disturbed by the military draft. He wants to know should he enlist or wait until drafted. Another wants to know should he start college or will the draft take him out of college. Many boys have discovered upon graduating from high school that employers are reluctant to employ them because they are in the draft age. Many become resentful or discouraged. Some will enlist in the armed forces in order to get it over with. Others will wander aimlessly about trying to get a job wherever they can until the draft claims them.

Another source of the teen-agers' troubles is family relationships. Many ask how they can get along better with their parents. One teenager put it this way: "I am no baby any more. I'm trying to grow up and do a little thinking for myself." Another stated, "I don't want to hurt my parents' feelings or make them think I don't appreciate what they have done for me. I just want them to realize I am growing up and am no longer the child I used to be."

A mother of a sixteen-year-old

The mother looked at me after relating this episode and pleaded, "She is all I have. I don't want to lose her." I knew the girl quite well. She was shy and nervous and rarely mingled with the others. Her life had been most carefully sheltered and planned by her over-protective mother. The mother had no understanding of her daughter's problem.

Many teen-agers ask whether they should choose their vocation to please their parents or themselves. When parents insist on making the choice without taking the child's wishes into consideration, there is likely to be a great disappointment for the parents and unhappiness for the child.

Other questions students ask are, "What type of job am I best fitted for?" "How can I go to college without money?" "How can one go about getting a scholarship?"

Community Chests and Councils of America, Inc. photo

"I'm trying to grow up and do a little thinking for myself . . ."

girl confessed that she still selected all the clothing for her daughter, and chose what clothes she was to wear to school each day. The mother came to my office to discuss her daughter. It seemed that one morning the daughter confronted her and in a hysterical voice cried, "Mother, I am old enough to choose my own clothing to wear to school. I am no longer a child. I am sixteen and should begin to do things for myself," and with that she ran sobbing from the room.

"Where can I get a job?" "Where can I learn a trade?" "What fields are overcrowded?"

Questions concerning personality are high on the teen-agers' list. They ask how to become popular, how to make friends and become part of the gang, how to overcome shyness, how to improve their physical appearance, including such things as complexion, looks, obesity, skinniness and stature.

Boy-girl relationships pose another series of problems for the teen-ager. This includes "going steady," dating, the effect of religious difference in courting and marriage, understanding sex, kissing, petting and marriage.

Questions are asked in a frank and earnest manner and sometimes have a humorous as well as a serious aspect.

Once a tear-stained boy came into my office and complained that another fellow stole his girl friend away from him and would I help him get her back. Another time, a girl came in to enlist my aid in filling out an application blank for a modeling school. The application included questions and a form of a woman on which she was to put all her measurements. The girl already had her measurements on the figure, which she pointed out to me. She had all the questions answered except one reading, "Do you regard yourself as being shapely?" She fixed me with a frank and steady gaze and asked, "What do you think?"

Another girl came in to inquire whether it was proper to kiss a boy goodnight on her first date. She said she had to know before the next evening, because she was going out for the first time with this boy.

Many teen-agers are hesitant about bringing their problems to my desk. Therefore, during each school vear the students are asked to write down on a little card, unsigned, the problem that is uppermost in their minds and for which they would like an answer. We try to discuss these problems at student group meetings, through the school newspaper or by calling in outside agencies and specialists. Questions that pertain to school policy are answered at group meetings by the superintendent or principal. Most schools would find this procedure very helpful to their students. Many home room programs or school forums could be based on the problems submitted by students.

It is of tremendous importance to the teen-ager to be able to unburden himself to some sympathetic person. Because of the informality that usually prevails in the activities program the sponsors can sometimes play the role of confidant. The academic classroom situation usually does not provide for this atmosphere. One reason for this is that many times we are inclined to stress subject values rather than human values.

When the teen-ager attends school he is taught through the media of textbooks. In many cases, seeing that he absorbs the materials in the book is the chief end. His success in school is measured by the correct responses he gives in class or writes on his examination paper. If he fulfills all the academic requirements he is graduated with the proud approval of the school, which feels it has done a good job on him.

The school usually has done a good job. It has given the teen-ager many answers in subjects like science, history and algebra, and provided other worthwhile experiences and training. Yet, it may have failed to give him the answers to those questions and problems which concern him most.

Teachers can render an invaluable service to our school youth by becoming more interested in their troubles. In surveys I have conducted among students, the replies showed that many had problems they wanted to discuss with someone, but they didn't know where to go. Many reported they received help from a teacher. When asked why they went to that teacher, their replies were: "Because she understands," "Nothing is too much for her," "She is

"What fields offer the best job opportunities now?"





"Is 'going steady' a good idea?" . . . "What about petting?" . . . "Should religious differences affect marriage?"

never too busy to listen," "You can trust her," "She tries to look at the problem the way you do," "She makes you feel she is interested and wants to help you."

A teacher doesn't have to be an expert to deal with youngsters. All that is required is a friendly attitude, a sincere love of young people and an easy smile. These attributes will open the avenue for most youngsters to seek help with their problems.

We must not expect every youngster to have a problem or come with a problem. There are some students who will be difficult to approach or help. Some don't want to be helped, but prefer to be let alone. Others will try to solve their own difficulties as best they can. The wise teacher will know these students and their peculiarities and will not insist on trying to help, but will keep the avenue of approach open for them at all times.

It is important to remember not to expect the adolescent to understand his problem with the mind of a mature adult. He is in the process of maturing and must feel his way gradually. He will make mistakes which will appear ridiculous to the adult. He will flounder about while trying to form his own philosophy of life. Thus he will need understanding on the part of those with whom he comes in contact and under whose influence he works, studies,

plays and lives so many hours a day.

Frequently teen-agers are judged by the actions of a minority of their age group. The majority of students are good, cooperative individuals. Every school has a few who do not cooperate or are difficult to control. This however doesn't mean the entire student body is bad.

We do not place a stigma on adults because of the doings of a few. A principal doesn't condemn his entire faculty because of the acts of one or two of its members. How are teenagers different?

A great deal of the responsibility for teen-age difficulty can be traced to the actions and behavior of adults. From the time a child is born he is in an adult world. He imitates those about him. He imitates his parents, his teachers, the people he sees on TV, on the street or anywhere else that he comes in contact with the adult. The way the adults go so go our youth. Thus let adults set the right example—the teen-ager will follow the pattern.

The school is in an ideal position to help the teen-ager solve the problems that beset him. It is also in a position to undermine his faith in adults, causing him to turn to antisocial behavior. The responsibility for guidance belongs to educators. A question the teen-agers might well ask is, "Will our teachers and counselors take that responsibility?"



Taking in the "In-migrant"

Newcomers from Europe, Mexico, Puerto Rico are welcomed in Chicago schools and are helped to become part of the community

by GALETA M. KAAR

A FAMILY GROUP enters the principal's office. The parents value education and want to obtain the best by registration in this school. The father was a professional man in his native country. Although he is spokesman for the group he has not solved the problem of understanding and being understood. He is not sure what is expected of him in these alien surroundings.

He has no idea of the preparations the schools have made for the arrival of his family and those like it. He would be surprised to learn of the hours and hours of committee meetings and follow-up work in every category, from the Mayor's Commission on Human Relations to the conferences of a group of teachers within the school.

Mrs. Kaar, principal of the Elizabeth Peabody Elementary School, Chicago, is chairman of the Committee on In-Migrants, a subcommittee of the Human Relations Committee of the Chicago Public Schools.

In Chicago the General Superintendent of Schools is chairman of a Committee on Human Relations made up of school personnel chosen from all levels. The executive secretary of this committee is paid by the Board of Education. A Subcommittee on In-Migrants has met at least monthly for the past two years to consider the needs of newcomers who have recently come chiefly from Europe, Mexico, Puerto Rico and the southern part of the United States.

The subcommittee has invited to open meetings all principals and teachers who are working with "inmigrants." The whole group exchanges ideas, information and techniques. Common problems of registration, teaching techniques, materials, socialization and integration, and health services are discussed. For example, in order to find out what health services were available to those recently arrived, the residence requirements for hospitals and clinics were investigated, listed and sent to interested schools. A resource person from the Bureau of Child Study of the Board of Education furnished a list of materials to help teachers of in-migrants.

A teacher assigned to the Bureau of Curriculum has prepared a Selected Bibliography for Teachers of Puerto Rican Children which contains over fifty titles, and he is now working on units concerning Puerto Rico which can be integrated into the social studies program at each grade level. Twenty-one school principals and their district superintendent worked further on the special needs of the Puerto Ricans.

In one school a group of teachers studied the particular problems of this group and presented the follow ing report:

This committee believes that newcomers will be more sure to feel that they belong if they are treated as parents rather than as newcomers when they enroll their children in our schools.

Therefore we defined our purpose to be: to open and establish channels of communication between parents and the schools.

A simple and inexpensive handbook was prepared that would answer the questions that we have been asked by all parents.

Much as the newcomer may need and want classes in English, history, etc., we believe that feelings of acceptance would be injured if the school immediately—if only by implication—advised him to make changes in himself.

For this reason we have prepared the simple handbook so that two copies may be given the parent one in English and one written in his language—wherein he is welcomed as all parents are welcomed—and also has the reassurance of seeing his familiar language.

By having the translations made by authorized neighborhood organizations we can give him awareness of sources of help.

We further recommend:

That lists of classes, organizations, etc., be kept in the office of our school to be provided upon request after rapport has been established.

That a supply of enrollment blanks written in different languages be kept in the office to facilitate enrollment.

That the school staff be supplied with phonetic dictionaries of a few key words.

To carry out the last recommendation the list compiled by the Board of Education of the City of New York of "Expressions That Are Useful to the Teacher of Spanish-Speaking Children" was found helpful.

The Board of Education is conducting special classes in Spanish for teachers and clerks. In the night schools there are the usual Americanization and English courses and an experimental one for newcomers. At the weekly class meeting places of interest in Chicago are described with the aid of movies, slides and maps. On one Saturday of each month the group goes out on a tour to see what they have been discussing in class.

This special course was arranged by the Board of Education and the Cooperative Community Project for Newcomers. This organization, sponsored by the East European Fund, a Subsidiary of the Ford Foundation, has worked to integrate the recently



First lessons in the English language—special teaching techniques are used with newcomers in Chicago schools' special program.

arrived Ukranians, Latvians and other Europeans into the life of Chicago.

The schools welcome the cooperation of agencies interested in working for the good of in-migrants. The Labor Office of the Commonwealth of Puerto Rico furnishes materials and professional community workers.

The newcomers are finding their places in community life. Some mothers are active in the PTA. Representatives of their organizations attend meetings of the Community Councils. A Ukranian in-migrant is on the Lighted School House Advisory Committee. Those with artistic abilities participate in community programs and give concerts or recitals to which they welcome all their neighbors. In many a settlement house a newcomer is on the staff. He not only works with his own people but seeks to make them

understood by the older residents of the community. A Puerto Rican staff member, for example, gives lessons in conversational Spanish to a class including teachers and school clerks.

In the schools a child who has a toehold on the language is assigned to be the friend and helper of the just-arrived child of similar heritage. The children are given opportunities to make contributions from their native culture.

In all their dealings with in-migrants the schools are keeping in mind the fact that they have a great contribution to make. Before they left home and since they have come to the United States, the newcomers have heard a great deal about American democracy. They may look about them and see much that falls short of the ideals they hear preached. In the school and local community they can see these ideals in action.



Pupils join clean-up campaign in streets where many newcomers live.



Parents and teachers work together during vacation week to decorate the school.

A "Community-Centered"

by THEO J. NORBY and ALBERT GRANT

A REPORT CARD which may be called "community-centered" in that it is based on the opinions of local parents and teachers has been developed by the Inglewood, California, Unified School District. Other educators interested in the problem of formulating a reporting procedure that is satisfactory to both parents and teachers may find it helpful.

Early in 1951, revision of the card then in use was undertaken at the request of the Board of Education. The card was inconsistent with the community's educational philosophy, which had shifted in favor of greater emphasis upon the 3 R's.

What should cards report?

The Board's request stipulated that the revision should include a survey of parent and teacher opinion, and that their prevailing attitudes be taken into account. Therefore, as a first step, we made an inventory of the attitudes of these two groups as to the purposes that the reporting process should serve and the kinds of information it should report.

This inventory was made by means of two simple, open-end question-

naires, one sent to parents and the other to teachers. The parents were asked these questions:

 How might the reporting process be made more helpful to your child?

 What information about your child would you like to have the school report to you during the year?

The questionnaire for teachers asked these three questions:

What purposes should our pupilprogress reporting plan serve?

 What information should the reporting plan give parents and teachers?

•How might our report card be made more helpful to parents and pupils?

Replies to these questionnaires were carefully analyzed to ascertain the predominant beliefs of parents and teachers as to the nature and function of report cards used in the elementary school grades. The analysis enabled us to reach several helpful conclusions.

It was found that parents and teachers tend to believe that the major function of the reporting process is to give parents insight into the nature and extent of their children's learning progress. Further-

Mr. Norby is superintendent of schools and Mr. Grant is coordinator of curriculum in the Inglewood, California, Unified School District.

Report Card

more, they believe that the process should provide practical suggestions on how the home can best foster pupils' learning progress. They also agree that it should encourage and otherwise help pupils to do good work in school.

Should measure social development

Both groups also believe that if report cards are to serve their chief function, they should not be limited to reporting pupil progress in selected aspects of the curriculum but should provide information on the pupils' total learning progress, including their social development and citizenship. Incidentally, this finding also suggests the welcome conclusion that a majority of parents who tend to favor increased emphasis upon the 3 R's nevertheless want their children to have a well-rounded education.

Parents also believe that the marks which are used should show how well the pupil is progressing in relation both to standards for his grade and his individual ability to do school work. Teachers tend to agree that marking should be in relation

E-Excellent V-Vary Good G-Good Progress Progress Progress	M-Moderate ProgressNeeds to Improve		I—Incomplete Progress —Needs Much Improvement	
LEARNING AREAS	FIRST SCHOOL	SECONO REPORT	THIRD REPORT	POVETH
ADING	_		***********	
LANGUAGE ARTS				
Written Expression	-	-		-
Oral Expression	-			-
Spelling	_	And Advanced lines		-
Handwriting	-	-	-	K-Menter.
ARITHMETIC	_		-	-
SOCIAL STUDIES (History, Geography and Civics)		-	-	-
SCIENCE	-	-	************	_
HEALTH AND PHYSICAL EDUCATION		-		********
ART	_	-	-	
MUSIC				
		-	MANUFACTURE .	Marriage
		Name and Address of the Owner, where the Owner, which is the Owner, where the Owner, which is the	-	-
CITIZENSHIP REHAVIOR	-		-	Person
WORK AND STUDY HABITS				
ATTENDANCE				
Number of days present	-	-	and a second	*
Number of days absent	-	anament	-	-
Number of times late	and the same of th	Account		

Surveys of parents and teachers produced a report card that rates pupils on a 5-point scale ranging from "Excellent Progress" down to "Incomplete Progress." Insert sheet provides space for parents and teachers to make extra comments.

to both of these factors but put more emphasis upon the pupil's individual ability than upon standards for his grade.

Both parents and teachers believe that the reporting process should include group and individual conferences as well as report cards issued several times during the year. This finding was gratifying to the staff because our reporting plan had for several years included provision for regular conferences.

Parents and teachers were agreed that report cards should be individualized and diagnostic as far as possible.

With these conclusions available for use as guide lines, the development of a new report card was started. The work was carried on over a period of three years, during which time several revisions in the initial tryout form were made on the basis of suggestions contributed by parents and teachers. The card in the form in which it is now being used has the following characteristics.

First, the card provides for the giving of marks in each of the major areas of learning in the curriculum. These include the usual subject areas such as reading, language arts, and social studies and also the areas of citizenship behavior and work and study habits.

Use 5-point marking scale

Second, a five-point marking scale is used because it was felt by the teachers that this number was necessary to enable them to give marks which are discriminating and to some extent diagnostic. The five marks are defined on the card as follows:

- 1-Excellent Progress
- 2-Very Good Progress
- 3-Good Progress
- 4—Moderate Progress—needs to improve
- 5—Incomplete Progress needs much improvement

Much thought was given to developing a suitable definition of "5," the lowest mark on the five-point scale. We considered but discarded such terms as "failure" and "unsatisfactory." Instead we selected the term "incomplete progress—needs much improvement," believing that its effect upon the pupil, as a rule, will be more favorable.

Third, the teachers are instructed to mark in relation to all pertinent factors but to give emphasis to standards for the grade. The term "standards for the grade" is defined as being those standards which are implicit in the state-adopted text-books for the grade and the recommendations of the District's official "Guide to Teaching." This provision as to the basis of marking was developed in recognition of several factors.

Relate progress to standard for grade

Both parents and teachers believe that report cards should include information on the pupil's progress in relation to standards for his grade and his individual ability to do school work.

Parents tend to give priority to standards for the grade as a basis of marking and are supported in this by the widely accepted principle that the citizenship function of the public schools has priority over its personal-development function, although the two are usually not incompatible.

School marks are, as a rule, necessarily based upon both standards for the grade and the pupil's individual ability because we do not have sufficiently valid tests of native intelligence to be able to measure accurately the pupil's learning potential.

Parent can reply to teacher

Fourth, use of the card includes the use of an insert sheet which is labeled "Home-School Information Exchange." It is used by teachers whenever they wish to report supplementary information which they feel will make the marks more meaningful. The sheet also provides parents an opportunity to reply with information which they feel the school should consider.

In order to make the report card more meaningful to pupils, all who are in the fourth grade or above are requested, along with their parents, to sign the card before it is returned to the school. We believe that this feature does much to give pupils a greater sense of involvement in the whole reporting process.

Our evaluation of the experience of the past three years suggests that parents and teachers are in basic agreement as to the purposes that the reporting process should serve.

Evaluations show plan succeeds

They differ somewhat in their beliefs as to how the purposes of the reporting can best be achieved, but by means of democratic procedures it is usually possible to resolve those differences without sacrifice of valid educational principles.

Our plan of developing a report card on the basis of the opinions of parents and teachers has been gratifyingly successful, judging from subsequent evaluations made by these two groups. However, we recognize that some other type of reporting plan might conceivably be equally successful if it is mutually acceptable to the parents and teachers.

How

by JACK H. LIPSY

A DMINISTRATORS, TEACHERS and parents are all interested in the problem of homework for children. Widely divergent views are held by educators on the subject, ranging from no assigned homework at all to assignments taking two or three hours an evening.



Children need outdoor recreation.

For years, we educators have recognized with mixed feelings the possibility that our administrative success might be endangered by the wrong solution to the homework problem. Too much homework could be injurious to health and public relations. Too little, and the academic standing of the school and the attendant problem of college entrance boards have to be faced.

The amount of time which teachers are allowed to demand of pupils in home study is being greatly reduced in some schools. Is this wise? How much should be allowed at each age or school level? Why? Of what kind of work should this consist? Should home study supplement school study, or vice versa? What work could be substituted for the "study" which pupils do at home? How can home activities be better

Mr. Lipsy is assistant to the superintendent in the Woodstown Public Schools, Woodstown, New Jersey.

Much Homework?

Too much homework may harm the child's health and the school's public relations!

co-ordinated and integrated with the educational program that centers in the school? How can gross injustices, or inequalities, in the amounts of teacher demands on the students' time, be corrected? How do schools of other areas and of other countries manage the problem of home study?

I would like to offer some of the answers I have formulated from our school's experience and research.

"School homework" should be related to the school's aims and its philosophy of education.

Homework should not interfere with the child's health. Children need time to play outdoors, in the sunshine and fresh air.

Homework should not interfere with the child's assuming responsibilities in the home. Every child needs to have a part in caring for the home. This responsibility helps to knit the family as a group and provides valuable citizenship training.

Homework should not take so much of the child's time that he is denied opportunities to engage in activities of his own choosing.



A quiet place for concentration.

These activities develop interests, stimulate initiative and originality, and develop the child's mind.

Some "school homework" is needed. As parents and teachers we must be realistic. More and more homework will be demanded of the child as he advances through school. High schools demand large amounts of outside work, and in colleges nearly all studying is done outside of class time. A pattern of home study must be gradually developed as the child advances through school, otherwise he will have to make some difficult adjustments.

"School homework" should be of both an assigned and voluntary nature. By assigned homework is meant giving the child a definite task to do—such as reading a story or doing certain examples in arithmetic. Voluntary homework permits the child to do as little or as much as he chooses.

Need good study habits

The teacher who cannot get the child to work properly at school cannot expect good work to be done at home. The school's task is to provide a suitable environment for study and train the child in good habits of work. This training should begin in the earliest grades.

A desirable environment for home study is a quiet place, free from distraction; a comfortable desk and chair; good lighting; proper temperature and ventilation.

Desirable habits of work include: beginning work promptly; knowing the assignment to be done; having the necessary materials with which to work; knowing how to use these materials; concentrating on the task at hand and staying with it until it is finished.

The amount of homework assigned must be gradually increased from grade to grade. As the child advances through school it is reasonable to expect that the amount of homework can be increased.

An Administrative Advisory Committee consisting of two teachers, two principals and the superintendent of schools came to the conclusion, after research and discussion, that the following plan represented the best answer, at least for our district in New Jersey.

Grades Kindergarten to Four: No assigned homework except by special arrangement between parents and teachers. Teachers will make sure that this homework will be of a practice type only, in order to avoid conflict between home and school methods. Children should be encouraged to take home library books and easy reading materials. Since the health of the child is of major consideration, children should be encouraged to play outdoors as much as possible,

Grades Five and Six: Not more than one-half hour of assigned homework. Children will be encouraged, however, in addition to this, to do voluntary homework such as working on geography and history projects, listening to worthwhile radio programs, reading good books, practicing music lessons, participating in scouting activities and assuming home responsibilities. Outdoor activities should be continued.



More homework in higher grades.

Grades Seven and Eight: Between forty-five minutes and one hour of assigned homework plus additional activities, such as those recommended under Grades Five and Six. Emphasis on outdoor activities should be continued. Voluntary work should also be encouraged.

Grade Nine: Not more than one and one-half hours of assigned home study. Voluntary activities are to be encouraged. Citizens are asking, and

Educators Must Answer



some \$64,000 questions

by KEITH W. ATKINSON

L AYMEN ARE ASKING more and more questions about education. And educators, harried by unfair criticisms from a dissident minority, sometimes fail to answer candidly the questions asked by sincere and interested citizens.

Some educators attribute the increase in the number of questions being asked by citizens to the fact that more people have more children in school; some to the rapidly increasing cost of education, and the many critical articles written by those who have selfish motives or who generalize on limited knowledge.

The problem, however, is not to determine which of the many causes is most responsible for the questions. The fact is that potential supporters of schools are asking questions which leaders in the field of educahonestly.

tion must be prepared to answer

In the hope of creating a climate of understanding in which schools can thrive, and in which citizens will be dedicated to school improvement, educators must analyze, study, and develop a long-range program of school-community relations to gain the cooperation of the citizens who are asking questions.

Big jug, little mug

However, if teachers and administrators hope to achieve this understanding and cooperation, it cannot be stressed too forcefully that they can no longer think of teaching as a filling station job of pouring from a big jug into a little mug. Instead, they must accept teaching as a task which involves the active participation of professional personnel in a school program designed to meet the life needs of pupils.

Wholesome human relationships are basic to common understanding, and the development of good human relationships becomes one of the most important tasks facing teachers and administrators. It is important to realize that good relations begin in the classroom between a teacher and his pupils and then spread to the parents and, ultimately, to the entire community.

Teachers had better make certain that their students know why they are doing the things they are required to do. Unless students can explain at least the "why" to themselves they are at best confused and at worst plodding automatons, and in neither case are they ambassadors of good will. Pupils recognize good instructional procedures and talk about them to their parents and

Also, teachers and administrators must use their vocabularies judiciously. Poorly selected words or emotionally affected vocabularies, whether used in letters or telephone communications with parents or in comments to pupils, do not foster sound school-community relations. Neither do homework assignments designed solely to keep pupils busy.

Understanding each other

On the other hand, carefully planned assignments, based on educationally sound purposes evident to the pupil and his parents, do make a very real contribution toward the school's ultimate objective of effect-

Dr. Atkinson is professor of education at the New Jersey State Teachers College at Montclair.

ing community understanding and support. These things, and the way in which school people evaluate and report pupil progress, the skill with which they advise pupils responsible for school publications, the sympathy and understanding which they inject into the realm of pupil adjustment, the psychology and fairness with which they solve behavior problems, and the effectiveness with which they handle the many other routine aspects of their positions are all important to the smooth functioning of a school-community relations program.

The individual approach

But answering questions carefully and completely, and making certain that routine duties are performed in accordance with sound principles of school-community relations are only initial steps. If teachers and administrators earnestly desire to have their schools foster a climate of understanding and overcome the paralysis of inaction so evident on the part of many sincere citizens, they must take other equally challenging steps—steps which may be considered to be "beyond the line of duty."

Individual staff members may devise and use special approaches to develop desirable human relations and to promote true understanding. These approaches, of course, should be particularly suited to their own personalities and to their specific assignments and responsibilities.

Including businessmen

The teacher who enjoys working with parents may stress personal conferences and frequent small group meetings. The less gregarious teacher may work closely with parents through the medium of frequent informal written communications. The administrator, on the other hand, because of his numerous community contacts, might assist the teacher of English to organize a group of businessmen to read, appraise, and comment on business letters which students write as a part of their regular work in English. This practice would not only convince future employers that letter-writing of this type is taught effectively in the school, but would make businessmen "a part of the school business."

What did you do today?

The parents of children in a particular 4th grade class were convinced that their children were learning more in a given year than they had ever learned previously in an equal length of time. Was this because the teacher was superior to those who had taught the same youngsters in previous years? The fact was that their children were working with a teacher who remembered that the first question asked of most youngsters when they arrive home at the end of a day is "What did you do in school today?" Here was a teacher who prepared his pupils for their daily quiz at home by devoting the last five or ten minutes of each school day to summarizing what they had learned and to assisting them to be able to express their accomplishments in organized form.

Such methods of improving school-community relations can be utilized by individual staff members because many parents and citizens generalize about the school and its program from the teacher with whom their children work, the staff member whom they know, or the specific phase of the program with which they are familiar.

Even alert, wide-awake faculty members, however, will not assume that the total responsibility for effective school-community relations rests entirely with individual teachers or administrators. Instead, they will realize that many projects which foster good relations necessitate group responsibility and combined action—sometimes by an organized faculty association, at other times by a small, energetic group of teachers drawn together by a desire to achieve a common purpose.

Films, newsletters

In one community it was a faculty association that financed and produced a series of colored slides, accompanied by a synchronized sound track, depicting various aspects of the local educational program. The effectiveness of this project, which interpreted the activities of the schools to parents and interested citizens, was immeasurable. In another community a small group of determined teachers produced a film picturing the activities in an existing kindergarten, and persuaded the citizens of that community to vote funds with which to organize and operate two additional kindergartens. In still another situation, it was the members of the professional staff within one building who recognized the need for a school newsletter for parents. Today they edit a monthly bulletin which conveys to parents informal reports on current educational issues, messages pertaining to classroom and grade activities, and a friendly statement from some member of the staff indicating means by which parents and teachers can work together more effectively for the benefit of the children.

Enthusiasm or suspicion

While it is evident that the role of school personnel embraces only a small segment of the entire field of school-community relations, such participation by teachers and administrators will provide a firm foundation upon which to build the remainder of a well-balanced program.

The struggle between indifference and active support, between misunderstanding and understanding, is not a struggle which school people can leave for others to resolve. Instead, every member of the profession must play an active role in resolving the struggle in favor of education. If it were as easy to arouse enthusiasm as it is to arouse suspicion, the task would be a simple one, but unfortunately it is not.

Understand or destroy

Understanding produces not only a difference in the volume of opinion, but also a difference in the kind of opinion. People who are ignorant or uninformed are suspicious of what they do not understand and may be destructive. On the other hand, those who are enlightened or well-informed appreciate what they understand and if it is worthy of support, they will try to preserve and improve it.



A Michigan school bus driver takes sight screening tests in the presence of school superintendent, state trooper and the author.

Selecting School Bus Drivers

They carry a precious cargo and should be carefully chosen and trained for their job

by P. A. WICKSTROM

Field Services Specialist Central Michigan College Mt. Pleasant, Michigan A LTHOUGH SCHOOL BUS DRIVERS carry the country's most precious cargo, they are frequently poorly selected, badly trained and ill suited for their responsibility.

Much time and intelligent effort is spent in the selection of teachers and other members of the school staff, but there are no similar procedures for the selection of school bus drivers. Few school boards have clearly outlined emotional, physical and personality requirements and few school districts have set up definite personnel policies concerning drivers.

Ordinarily when a vacancy occurs, someone is picked haphazardly who is willing to take the position. He may be a retired person whose only qualification is that he needs the income or is able to get along on a part-time job. Sometimes the person hired is one who is willing to underbid others for the place, having so little faith in himself that he will work for less than anyone else in the community.

Such a policy of bidding may be sensible when applied to the local mail service, but becomes nonsense when the need is for a responsible person to transport children.

Jobs considered political plums

Some drivers' jobs are handed out as political plums to relatives of important men in the community. Often they are given to teachers as a supplement to their income, disregarding completely their driving skills and other qualifications and the fact that such duties interfere with responsibilities in the classroom.

After drivers are selected, and despite the important nature of their jobs, they are like step-children in the school employee picture and enjoy little social status. When teachers' meetings are held, drivers are rarely invited, even though control of a bus-load of children involves many of the same techniques used in the classroom.

Very seldom are school bus drivers called in to help build good public relations. Many of them are important members of the community, belonging to service and civic clubs and working for community improvement. By nature of their residence and activities, they can, if asked, influence good community attitudes toward the school.

When new transportation equipment is purchased and changes in routes suggested, the drivers seldom are asked their opinions. Even in the very important area of the school bus safety patrol, they have little chance to be heard. School officials often superimpose a safety patrol system upon the drivers, frequently selecting students who get along badly with others and teacher sponsors who are unfitted by nature or personality for the job. When salary schedules are set up, the position of the bus driver is seldom considered. His remuneration is frequently not commensurate with the job.

List requirements for drivers

The problems of selection and the creation of more positive attitudes regarding school bus drivers are not insurmountable. Regarding selection, certain definite requirements can be listed which may serve as a guide to boards of education and superintendents. For instance, the following might be useful:

Character: Among the elements recommended in setting a character standard are dependability; self-reliance and leadership; ability to get along with others; freedom from use of undesirable language; personal habits of cleanliness; moral conduct above reproach; honesty; freedom from addiction to narcotics or habit-forming drugs; freedom from the use of alcoholic beverages.

Emotional Stability: Patience; consideration; even temperament; calmness under stress.

Physical Requirements: Enough physical strength to handle bus with ease; possession of full and normal use of both hands, both arms, both feet and both legs; freedom from any communicable disease; freedom from mental, nervous, organic diseases—epilepsy, paralysis, insanity, diabetes, abnormal blood pressure, and heart ailments; good vision.

Experience: Applicants must have a driving record free from accidents

and have a knowledge of driving laws and regulations.

Skill Requirements: All applicants should show requisite skill in handling a school bus.

In creating more positive attitudes toward bus drivers school people should constantly attempt to build up the status of the drivers and emphasize the fact that they are important school employees. Drivers' opinions and suggestions in planning routes and buying equipment should be taken into consideration.

Full confidence should be given them and they should have the same backing by the administration as other employees. They must be given a sense of belonging to the school and of being paid according to their duties and position.

Our Northern Michigan School Bus Driving Program attempts to carry out these objectives. In working with drivers, we stress the necessity for qualifications and training, and with school people in general we try to make for better attitudes toward drivers. The program has been in operation for five years. It is sponsored by the State Department of Public Instruction and administered by Central Michigan College of Education, Mt. Pleasant, Michigan. Sessions are conducted by staff members of the Division of Field Services.

County superintendent coordinates program

Our program takes place during three or four days once a year in our 38-county service area. The county superintendent is the key administrative person in the planning. He sets the place of meeting, alerts local superintendents and generally acts as a coordinator. Classes are held both daytime and evenings.

The actual instructional plan for drivers is divided into three main areas of study. The first discussion centers about the State Vehicle Code which every school bus driver is required to know. Then the problem of operating a school bus over Michigan's congested highways is analyzed. Regulations and laws govening such elements as speed limits, turning procedures, handling of the bus in emergencies, and loading and

unloading practices are discussed.

The second session is devoted to defining drivers' relations with children, with parents and with school personnel. Tried and proven techniques for handling children are explained. Stress is always placed upon the use of positive methods. Discussion also touches good attitudes of drivers toward parents. We constantly emphasize the fact that drivers should be concerned with establishing friendly relationships with them. We point out that drivers should support school policies when adopted and be loval to the administration and the school program.

During the last class period, the bus drivers are given psychophysical tests which evaluate them in terms of brake reaction time, visual acuity, distance judgment, color vision and field of vision. Here much is found out about their physical fitness.

Discuss policies in hiring drivers

In addition to having sessions with bus drivers, we request local superintendents and board members to meet and discuss transportation problems with a member of the Division of Field Services. There, good selective policies in hiring drivers are pointed out, and more positive attitudes toward them are encouraged. Regulations and costs of transportation from the local as well as state angle are explained.

Central Michigan College's School Bus Driver Training Program is a continuous one, and many drivers have attended sessions since its inception. What this continuity means is that safety techniques are emphasized so often and so much that good driving habits and healthful work attitudes tend to be established.

The training program has resulted in the development of better methods for selecting drivers. Safe driving habits and patterns among drivers have been set up. Administrators, school boards and the general public have built up positive attitudes toward the school bus driver, and the drivers have realized that they may be extremely influential in a positive manner in the school program.

TABLE I

Free response survey of 130 teachers indicating preferential rank of qualities most desirable in their co-workers.

Quality Percentage of teachers ranking each quality

	Teachers' 1st choice—%	Teachers' 2nd choice—%	Teachers' 3rd choice—%
Cooperativeness	29	17	18
Considerateness	23	24	11
Intelligence	17	11	12
Sincerity		11	10
Dependability	7	13	13
Emotional Stability	7	9	14
Resourcefulness	2	2	1
Appearance	2	2	7
Refinement	2	5	4
Vitality	2	2	2
Self-Reliance	1	0	2
Buoyancy	0	4	6

Emotional stability?
Intelligence? Appearance?
Refinement? Buoyancy?
Resourcefulness?
Sincerity? Self-reliance? . . .

What

Makes a Good Teacher?

by JOSEPHINE B. WOLFE

WHEN NEW TEACHERS are selected for the staff of a school, the administration might get some interesting insights on how to choose them by consulting the teachers who will be working with the newcomers.

A cooperative study made by elementary teachers and administrative personnel in the Ridley and Springfield Townships, two suburbs of Philadelphia, Pennsylvania, showed the qualities the faculty would consider most desirable in new teachers.

How would teachers select co-workers?

A "Teacher Work Sheet for Selecting Co-Workers" was prepared by teachers and principals under the guidance of John W. O'Brien, Assistant Superintendent of Schools in

Miss Wolfe is supervisor of elementary education for the school district of Springfield Township, in Springfield, Pennsylvania. Ridley Township, and the writer, who is Director of Elementary Education in Springfield Township.

Each teacher was requested to indicate his preference by ranking the twelve personal qualities listed on the worksheet from one to twelve (Vitality, Appearance, Cooperativeness, Intelligence, Buoyancy, Considerateness, Dependability, Emotional Stability, Sincerity, Refinement, Resourcefulness, Self-Reliance). The qualities listed were gleaned from a study of the literature interjected with the personal perceptions of the committee, each quality being described, such as Vitality (physical health, energy, endurance, ambition), Appearance (dress, physique, neatness, cleanliness, posture). No names were to be signed to the worksheets. However, there were spaces to indicate the grade taught, number of years of teaching experience and number of years of teaching in the present school.

No discussion or explanation preceded the first survey. Since the committee wished to receive a free response type of thinking, the worksheets were distributed, filled out by the teachers and collected at a faculty meeting sponsored by each principal. This survey indicated the order of importance attached to each quality by the 130 teachers, as shown in Table I.

Ask teachers to rate qualities

One week later, faculty meetings were held in each of three schools within the two districts under the guidance of their respective principals. No instructions were given to the teachers prior to the meeting. The principal told them that there was to be a faculty meeting for the purpose of discussing problems pertinent to the school's program. At the meeting, each quality listed was discussed by small groups. The teachers then ranked the qualities again. Thirty-six elementary school teachers participated in this program and listed in preferential rank the eight qualities they would most desire in a new "next-door neighbor," as shown in Table II.

At the same time, the fourteen members of the administrative personnel of both school districts were requested to indicate their preference by ranking the twelve qualities in a free responsive manner similar to the first experiment with 130 teacher participants. The order of their first three choices is shown in Table III.

There was found to be a marked consistency of relationships among the three studies. The qualities of inenvironmental factors, the adoption of any one single formula for all situations is impossible. What, then, does the study indicate?

Although teacher participation in the selection of staff in an advisory capacity is a healthy and wholesome "lifter" to faculty morale, we must be aware of possible pitfalls. The following "we won'ts" must be considered:

We won't work without a plan.
 Without a stated cooperative plan of action among staff and administration, all will not be harmonious. Definite planning with continuous eval-

uation of policies and procedures will be needed.

- We won't move too rapidly. Such a plan requires tremendous thought. Clearly, a program that is sound must be built from a solid foundation.
- We won't plan to economize time.
 If the Board of Education and superintendent hope such a program to be
 a successful one, teachers must be
 provided with adequate time to do
 their assigned roles. Released time
 from the classroom would be the
 most effective method.
- We won't spare the finances. Sufficient funds will be needed for teachers to be provided with sunstitutes and allotted expense accounts when they deem it advisable to visit a prospective selectee.

Committee needs perceptive teachers

• We won't choose just "any teacher" to serve on the selection committee. The composition of the committee is very important. Perceptive teachers free from emotions and personal prejudices and with consideration for environmental factors will be an asset to any team.

No doubt there are many other cautions to observe, but the following is a feasible plan which may be tailored to fit the particular school.

Step 1—Select a committee representing the superintendent of schools, a member of the supervisory group,

TABLE II

Preferential ranking after discussion by 36 teachers of the 8 qualities most desirable in colleagues.

Quality Pe	ercentage of teac	hers ranking	each quality
	Teachers' 1st choice—%	Teachers' 2nd choice—%	Teachers' 3rd choice—%
Intelligence	42	14	11
Cooperativeness	9.9	32	
Sincerity		11	32
Considerateness	8	31	34
Emotional Stability	4	14	28
Dependability	0	0	3
Self-Reliance	0	0	2
Vitality	0	0	2

telligence, cooperativeness, emotional stability, considerateness, sincerity and dependability all appeared as the most desirable qualities to be considered when selecting a new staff member. The committee at the same time discovered agreement between their findings and the findings in the literature.

All teachers eagerly cooperated in the study. After the results were reported to the participants, it was suggested that a small teacher group might serve as an advisory committee to the administration in the selection of teachers. At the end of the first year, it was recommended that some form of appraisal be made of the proposed method.

Because of the wide variation in

TABLE III

Free response survey of 14 administrators indicating preferential rank of qualities they consider most desirable in teachers.

Quality	Percentage of	ge of administrators ranking each que		
		dministrators' st choice—%	Administrators' 2nd choice—%	Administrators' 3rd choice—%
Emotional Stability	***************************************	37	14	7
Cooperativeness		21	14	7
Considerateness		21	30	7
Intelligence		14	7	30
lincerity		7	7	14
Dependability		0	14	14
Buoyanev		0	7	0
Vitality		0	7	0
Resourcefulness		0	0	14
Appearance	49.10070011001010100000	0	0	7
Refinement	*******	0	0	0
Self-Relignce	***************	0	0	0

the principals and the teachers. Such a committee might be considered an advisory committee, or a steering committee. The size of the committee should be kept relatively small (six to ten) for effective operation and should function on a rotary basis. Members of the committee should be of a warm, understanding nature, sensitive to people and informal in their manner.

Step 2—Provide a day of visitation for each selectee. Of course, the day's program should be well planned and organized by the advisory or steering committee.

Hold informal discussion period

Step 3—Plan an informal question and discussion period with the selectee. The environmental setting and atmosphere should be relaxed and natural. This should be a period where the selectee is encouraged to ask questions relative to the total educational program as well as the following areas:

- cultural and social environment (human relations)
- · physical background
- appreciation and understanding of children's feelings
- · Interest in job per se

Step 4—Provide an opportunity for the selectee to appraise his day's venture. This time should be devoted to the selectee's appraisal of the various situations he has observed throughout the day. It would be an opportune time for the steering committee to evaluate the selectee's insight and sensitivity into "on the job" happenings.

Step 5—Structure inquiry questions to be used by those seeking information relative to the selectee, such as, "What was Mr. Brown's relationship with his pupils? with his teachers? with his administrative staff?"

Certainly, with such a plan teachers will become more interested and enthusiastic, and will feel responsible to a much greater degree for the success of the newcomers. In turn, new teachers will have a greater feeling of security because they have been chosen by the people with whom they are going to work.

Substitute Teachers

By VICTOR E. LEONARD

W E CAN ALL RECALL how, when we were youngsters in school, we used to enjoy the days when there was a substitute teacher. It was usually the time for all Hades to break loose. Woe to the substitute who did not possess a strong back and a stronger will.

When the hiring of substitutes is a haphazard affair, and the teachers are not carefully selected beforehand, the school cannot maintain a high level of instruction. During the school year, it is inevitable that regular staff members will be absent because of illness, attendance at meetings, and for other reasons. The school must have competent substitute teachers available.

Improve methods of hiring substitutes

In the Greenwich, Connecticut, school system, which has a staff of about 400, we decided to improve our method of hiring substitute teachers. A committee was formed from our workshop group. This committee studied the situation from all aspects. It was decided to prepare a handbook for substitute teachers, to include all the essential information about our schools. The committee sent an invitation to all interested persons to attend a special meeting. At this session, about 35 substitute

teachers attended. The assistant superintendent of schools was chairman of the meeting. Our ten school principals and the supervisors of our "special subject" areas also participated.

At this orientation meeting, substitute teachers met the administrators and also had the opportunity of talking with the other substitutes. The policies and procedures of the schools were discussed, and questions about specific tasks were answered by the school personnel. Each substitute teacher was given a handbook which contained all of the vital facts needed. Refreshments were served, and the affair was both informative and social.

In our school system we schedule staff meetings in each school building on the first and third Monday of each month. The substitute teachers were invited to attend one of these sessions in the fall. Some were assigned to each school. They came to the school before the meeting time and visited the building. At the meeting they learned about the particular school, and its many special interests and features. They met the teachers in the school, exchanged ideas and learned about the school's programs.

Meet competitive salary standards

The substitute teachers met with the superintendent and assistant superintendent and were briefed on the general philosophy of the schools.

One of the important considerations in the hiring of substitute teach-

Mr. Leonard is principal of the North Mianus School, Greenwich, Connecticut.

are Important

Schools might adopt the popular slogan . . . "Accept no inferior substitutes!"

ers is the question of salary. It is necessary that we meet or improve on the salary paid in the neighboring towns. Substitute teachers will work where the salary and working conditions are best.

Handbook gives information

The handbook which has been developed for our substitute teachers contains the following information:

Copy of the Greenwich philosophy of education.

Homework policy in our schools. Statement of liability involving pupil and staff.

A directory of the public schools, listing all personnel.

Current pay scale for substitutes with tax exemption certificate.

List of conditions for substitute teachers (retired teachers may substitute 60 days in Connecticut, and uncertified persons may substitute 30 days).

Statement on discipline.

Instructions for correction of pa-

Report to be left the regular classroom teacher,

There is also a list of items to be given the substitute teacher by the principal in the school where the substitute teacher is assigned. These include:

Teacher's daily and weekly lesson plans.

Class register.

Seating plan for the class or classes.

Individual school bulletin. This includes hours of session, lunch program, special subject schedules, and building responsibilities and assignments.

These materials have been valuable to our substitutes this past year. Additional recommendations will be forthcoming from the committee as time goes on.

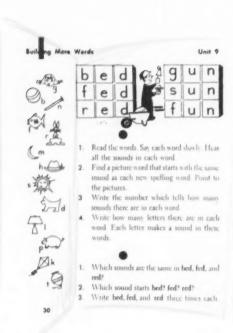
It is generally accepted that we can improve our educational program if we hire substitute teachers who are of the highest professional caliber. The superintendent and his assistant interview all people interested in serving as substitutes. A list is made and sent to each school principal. It is the responsibility of the principal to select the substitute teachers for his building. The regular teachers are asked to notify the principal before 7:30 a.m. if they expect to be absent from school.

Substitute teachers who are hired for a long period of time are given a special salary adjustment to compensate for the additional duties that are required.

It is our belief that the entire program will benefit from our new program for substitutes. We know that a chain is as strong as its weakest link. Too often, a weak substitute can hurt the instructional program. We want our children to be given the best teaching possible, under all conditions.



Class work praceeds smoothly when substitute teachers are well prepared.



Pupils Without Books

We're heading for bookless schools . . . if budgets don't provide for replacing worn-out books as well as buying new ones for an increased pupil population

by WILLIAM E. SPAULDING

E VERYONE KNOWS by now that we are facing another "crisis" in education caused by a big increase in the birth rate.

Everyone is aware that the shortage of teachers and classrooms is appalling. But there's a third shortage, equally appalling, which most people know nothing about. That's the shortage of school books.

Ever since 1946, the last year preceding the big enrollment increases, we've run farther and farther behind in our purchase and supply of text-books. Today the average pupil in the public elementary school is only a little more than half as well supplied with books as he was in 1946. If we had made up in 1953 the book deficit that had developed by that year, we would have had to spend for books, in 1953, from 30 to 50 million dollars more than we actually did spend.

Now on the face of it, that hardly

seems possible. Let's look at the figures. In 1946, there were about 20 million children enrolled in all our elementary schools. In 1953 the number had increased by 20 percent to some 25 million. Total expenditures for elementary school textbooks in 1946 were \$36 million; in 1953, they had risen to \$76.5 million. Isn't that enough to take care of a 20 percent increase in enrollment and a 79 percent increase in textbook prices?

How does it check out? We spent about \$1.80 a child in 1946. The equivalent amount, in 1953, would have been 79 percent more than this, or \$3.22. Actually, we spent \$3.06 per child in 1953, less than enough to cover the increase in price, but not enough less to explain an alarming textbook shortage.

The trouble is that this kind of figuring—a comparison of per pupil expenditures—misses completely one of the principal cost factors which we face whenever we have an increase in enrollment.

Suppose that at the end of this year you have thirty children in a Fourth Grade class. Each of them has an arithmetic textbook. You know that an arithmetic text lasts about five years before it wears out. These thirty texts vary in age from one to five years and you know that about a fifth of them will have to be thrown into the ashcan at the end of this year because they are not in fit condition for further use. So you will have 24 usable arithmetic texts for the children who enter Grade Four next September. You know, also, that next year you will have forty children in Grade Four-ten more than this year. That means sixteen new arithmetic texts to buy-six to replace worn-out copies, and ten for the increase in number of children.

Now let's see what happens if we figure on the basis of per pupil cost. Suppose that the price of your Fourth Grade arithmetic is \$1.60 a copy and that since there was no increase in enrollment this year you had to buy only six copies for the thirty children in the class—just enough to replace the worn-out copies. You paid 6 times \$1.60, or \$9.60, for arithmetics, and your per pupil cost for arithmetics was just 32 cents.

Dr. Spaulding is chief editor of the education department of the Houghton Mifflin Publishing Co., Boston.

Next year you will have a onethird increase in your Fourth Grade enrollment. The economy-minded chairman of your school board says, "Increase your expenditures for arithmetic texts by one-third to take care of your one-third increase in enrollment. There's no reason for you to spend any more per pupil than you've been spending."

Money vs. books

One-third more than the \$9.60 you spent this year is exactly \$12.80, and that amount divided among the forty Fourth Graders you will have next year gives you 32 cents each, the same per pupil expense you had this year. This is all very fine if your aim is to hold to the same outlay of money per pupil year after year, but not fine at all if you are concerned about holding to the same outlay of books per pupil.

We had already figured that with ten more children in Grade Four next year we must buy sixteen new arithmetic texts-six to replace worn-out copies, and ten for the increase in the number of children. Sixteen times \$1.60 is \$25.60-exactly twice as much as the \$12.80 when you figured by the per pupil expense method proposed by the school board chairman. And your cost per pupil would double next year too. It would be 64 cents instead of 32 cents. In this instance, a one-third increase in enrollment actually calls for a 100 percent increase in expense -if the same supply of books is to be maintained as in the past.

Cost of replacement

What is true of this single arithmetic textbook is true of all the books which a pupil needs and uses in his school work. It is true of every grade throughout the school system. For all books, as with the arithmetic, there are two fundamental items of cost—replacement cost and the cost of a wholly new outfit of books for each one of the extra pupils who enters each grade each year.

Our national expenditures have not even kept up with price and enrollment increases on a straight percentage basis. They have made no allowance for the purchase of new books so that the total number of usable books on hand will equal the number of pupils entering a grade each year. It's small wonder then that we've run into an appalling book shortage, with the per pupil supply of usable books in the elementary schools of this country probably more meager than at any time in the past twenty years.

In the Fourth Grade we've been talking about there were only ten pupils in excess of the number enrolled in that grade the previous year—just ten who were in need of a completely new supply of books. In the country as a whole the number of such pupils has averaged over a million a year since the enrollment rush began in 1947. That's a total of more than eight million elementary school children who have been in need of a complete new supply of books.

Studies tell us that schools that are best equipped with books show the best educational achievement. To the extent that this is true, our educational standards have been falling off ever since these enrollment increases hit us. We have unquestionably been shortchanging a whole generation of pupils on their school books. and for them that shortage can never be made up.

The American people have an almost reverent belief in books. Education and "book-learning" are synonymous. They believe in teachers and in schools, too—and given the facts and a clear statement of the need they will insist on the expenditure of the money necessary to support the millions that they must invest in salaries for additional teachers and for new classrooms.

A classroom without books is like a restaurant without food. We can't afford to load new and often inexperienced teachers with classrooms of 40 to 60 children and then expect them to do a good job without books, which are the essential tools of their trade.

To stop this rapid trend toward "bookless" schools, we can't take stock too soon. What do we have? And what do we need?

When the taxpayers know the simple facts of the situation, they'll be ready to spend whatever is necessary to replenish the supply of wornout, obsolete texts and to give every child in the school the equipment of books he needs.



The Village College movement in rural Britain provides attractive modern community schools and recreation centers for students old and young

THE VILLAGE COLLEGES of Cambridgeshire are carrying forward the community school idea in England. Five of them are now functioning, and five more are projected by the local County Authority. Each of the existing schools combines secondary and adult education in both day and evening programs. Each unit serves several small communities.

In the middle 1920's Henry Morris, then Secretary of the Cambridgeshire County Education Authority, became convinced that a new conception of education for state schools in rural England was greatly needed. He realized that with the coming of modern industrialism the old medieval functions of English villages had largely disappeared. Generation after generation of young people were leaving rural areas for the glamor and the better paying jobs of cities. As a result people were coming to view the English village as an inferior place in which to live—a mere backwash of modern industrialism.

Henry Morris became convinced that Village Colleges serving a number of small communities might restore a meaningful rural life to many districts of England. According to his developing plan, small, inferior village schools would be combined into regional school units, in what in the United States would be called consolidated rural schools.

The unique part of the conception was, however, that Village Colleges would, in fact, become the educational and social centers for adults as well as for children. According to his then revolutionary idea their programs would enrich the life of each supporting area, furnish stimulus for economic revival and become significant centers of local culture and learning.

Henry Morris, who later became Sir Henry Morris, has recently retired after many years as the Chief Educational Officer of Cambridgeshire. Under his administration the fifth Village College Unit was opened in October, 1954. To each one of these Colleges there now comes a



66

stream of foreign visitors who in their own situations have developed the germ of the Village College idea. On the day Impington College was visited, the Head of a school in Tasmania observed the program which some years earlier had stimulated him to develop a comparable school in his own country.

The five College campuses are things of beauty. Each is located on a plot of at least ten acres. Building designs have varied somewhat in the different units. Conceived in the 1920's, when rural schools in England were largely housed in ancient and non-functional buildings, the basic design of the Village Coll ges was developed by the world famous architects Maxwell Fry of England and Walter Gropius, professor of architecture at Harvard University.

The buildings of Bassingbourn, which is the latest unit, were planned by the local County Architect, keeping within the financial limits set by the National Ministry of Education. Here the basic design of the four

Colleges

by SAMUEL EVERETT

Dr. Everett, associate professor in the Department of Education at New York's City College, spent the past year in England collecting material for a book on English secondary schools. earlier units was somewhat modified. But all five include a beautiful central hall, an adult wing, a large gymnasium, an auditorium with stage, a library, classrooms of different color and design, craft rooms, kitchen and greenhouses. Color, design and furniture are all modern.

In all Colleges private gifts of land, money for buildings and statuary have been made by both English and American enthusiasts who have been inspired by Henry Morris and the Village College idea. At Impington an entire wing is reserved for adult use. This consists of a beautifully panelled meeting room, game room, classroom and lounge. Due to financial restrictions, at Bassingbourn such special facilities are limited to a very attractive panelled room, just off the main hall, and a lounge with high ceilings and long windows, which is reserved for the adults of the community.

Also house pupils on secondary level

All the Village Colleges house secondary modern day school pupils eleven to fifteen years of age. Two of them also have grammar school forms, and in time one-third of the pupils will be taking a grammar school course. Only a small number stay on for study beyond the leaving age of fifteen years. An increasing number are already staying on until age sixteen. Curriculum and teaching are much the same as in other English secondary schools with similar pupils, though these schools are unusually rich in arts and crafts as well as in rural studies.

Adult programs are scheduled both during the day and evening in all Village Colleges. When Impington was visited a number of elderly men were using the game room, or were reading newspapers and magazines. Libraries in these schools are for both adults and adolescents. In the new unit at Bassingbourn three greenhouses are planned, with one of them reserved for adult use.

Many classrooms are used in evening programs. In all Colleges the adult wing, assembly hall, library, arts and crafts rooms are in great demand. Village and regional adult groups may rent meeting places for a nominal sum like three shillings and sixpence, or fifty cents in U. S. money. At Bassingbourn the school gymnasium is regularly used by men in the nearby American Air Force Hospital who have marked off a basketball court on the floor. Buffet teas and snacks may be ordered in advance. One Village College brochare gives the welcome information that "Our cooks are anxious to hear of local special dishes and to know of your special tastes."

Student Council represents adults

Close touch with adult needs is guaranteed through a Student Council in each of the Village Colleges. All adult classes elect a representative to a Council, as do all adult organizations making regular use of the building. In addition, each village has a representative to the Council.

Student Councils elect their own officials. They raise large sums of money on dances, dramatic performances and many other activities. Councils have control of these funds, which they spend in equipment and program. They recommend courses to the Wardens, who are the administrators in charge of each Village College. The Wardens then arrange schedules and procure teaching personnel. Each of these administrative heads has at least one assistant who is in immediate charge of the adult program.

The beauty of spacious grounds and buildings, the quality of staff members, the varied and rich program in these Village Colleges, all serve as proof that supporting communities put a high valuation upon the education of all citizens. These community schools are obviously enriching the material and cultural life of the areas they serve. In his own lovely section of England Henry Morris' dream is coming true. The Village Colleges which were brought into being under his inspiration and direction are serving as a stimulus to educators and laymen everywhere who believe that schools should improve the quality of community living.



A single outdoor privy, poor classroom facilities characterize many rural schools where community rejected reorganization.

Explaining District Reorganization

by DAVID M. DENNIS

In a recent survey of 135 citizens in five midwestern states, it was found that only a little over one-fourth were aware that the purpose of the reorganization of school districts is better education. About one-sixth gave an answer similar to that of a farmer who lives near Cassville, Missouri: "There's no damned reason at all." The common response was, "To make more taxes."

A farmer in Minnesota swore that reorganization was just a way to get control of rural children: "I'll not have any of my children goin' to town and l'arnin' to become delinquents!"

The citizens of the towns and villages also need information. An inhabitant of Elgin, Iowa, made a typical remark when he heard that a farmer in the area was strongly favoring reorganization. His words were: "Wonder what he will get out of this,"

Town folk and rural all may derive many benefits from reorganization, but without enough information they tend to look at it with distrust and allow their minds to be guided by emotions.

There are questions which have

come up repeatedly in written sources, at meetings where reorganization is discussed, and during some 200 interviews with citizens and leaders in Illinois, Iowa, Minnesota, Missouri and Nebraska.

The questions can be divided into the following four sections: 1. questions raised before plans are considered; 2. questions raised while making the plans; 3. questions raised after the plans are made; and 4. questions raised shortly before an election.

Questions raised before plans are considered.

Questions raised during this cycle relate to the general nature or reorganization. In giving answers to the questions, the leaders try to awaken an interest in schools. They try to get people to analyze the results of school training and consider the good and bad points of school district organization in an effort to stimulate a desire for a better school program.

- 1. What is the major purpose of the school?
- 2. Who should participate in making school policies?
- 3. What can the people of this state do to improve school district organization?
- 4. Is the reorganization of school districts mandatory?
 - 5. How does this state compare

with other states in the number of school districts?

- 6. Will reorganized larger districts have greater permanency?
- 7. Will larger school districts make possible a more diversified educational program or a broader curriculum offering?
- 8. Will organization of the school districts tend to improve supervision of teaching?
- 9. Will the reorganization of school districts tend to eliminate the duplication of facilities?
- 10. Will reorganization of the school district promote greater economy?
- 11. Will school costs be more equitably distributed if reorganized districts are established?
- 12. What do educational authorities say concerning this general type of reorganization?
- 13. What are some of the deficiencies of the existing school districts?
- 14. What disadvantage is there from the pupils' standpoint in a small school?
- 15. Does school district reorganization mean increased state control of education?
- 16. Will reorganization of the school districts result in fewer school board members?
- 17. Can a school district serve a large area or a large number of people?
- 18. How can the school and the community work together to achieve

Mr. Dennis is supervisor of the H. H. Hahn Campus School at Nebraska State Teachers College in Wayne, Nebraska. reorganization of school districts?

19. How is reorganization accomplished through the state and county committees?

Questions raised while making the plans.

At this particular time, the planners generally ask the questions themselves.

They are going to want to know what makes a good school district, which services are needed, how to attain the best school, who controls the most votes, and what information is to be given to the people.

- 1. What type of organization is provided to study school district reorganization?
- 2. What are the duties of the state committee on school district reorganization?
- 3. What are the county survey committees?
- 4. What reports are required of the county committees?
- 5. Where may additional information be secured relating to school district reorganization?
- 6. What is a desirable school district?
- 7. What is an administrative district?
- 8. What is an adequate educational program?
- 9. What is the desirable minimum enrollment size for an elementary school and for a high school?
- 10. What is a desirable minimum pupil-teacher ratio?
- 11. What districts are to be considered and how much money did each expend for education during the past few years?
- 12. What are the valuations of each of the districts and what is the total?
- 13. How many children are there in each district?
- 14. What are the sizes and general boundaries of the present trade areas and social attendance areas?
- 15. Is school enrollment in rural areas declining and why?
- 16. How many nonresident high school pupils are there?
- Should provisions be made for a junior college, for area vocational

- school, and for adult education?
- 18. Will reorganization of school districts result in the loss of any state aid?
- 19. Must the school board of a consolidated district furnish free transportation for pupils residing in the district?
- 20. Do the boundaries of reorganized districts have to follow those of existing political units?
- 21. Should existing school buildings be utilized where possible?
- 22. Would the larger number of children necessitate additional physical facilities (buildings)?
- 23. If rural districts join a district that has a high school building, do they become owners of that building?
- 24. How far may the children be required to walk to meet the school bus?
- 25. Will parochial school children be allowed to ride the buses?
- 26. When can an election be called?
- 27. How may reorganization be accomplished using the petition method?
- 28. If a voter has signed a petition to become a part of an enlarged district, may be remove his name from the petition?

Questions raised after the plans are made.

Since this is the time when people are learning about the plan of reorganization and are discussing it, one might expect that most questions will pertain to the proposal. There will be some questions concerning alternate solutions to the educational problems of the community but most people will want to know how the reorganization will affect them.

- May the people of a district appeal from the recommendations of the county committee to a higher authority?
- 2. Who makes the final decision on the recommendations of the county committees?
- 3. Why is district reorganization needed?
- 4. Does the high school provide desired vocational departments?

- 5. What percent of the farm boys and girls are attending high school?
- 6. Do teachers in rural ungraded schools have training comparable to that of teachers in larger schools?
- 7. Will reorganization tend to increase the opportunity for a high school education?
- 8. Are the smaller schools offering an adequate health and physical education program?
- 9. Do the smaller schools offer a fine arts program?
- 10. Do the smaller schools offer an adequate hot lunch program?
- 11. Are per pupil costs higher in smaller schools?

Rural schools lack teachers

- 12. Why is it difficult to secure teachers for rural schools and to hold them?
- 13. Whose responsibility is it to provide housing for the non-resident pupils?
- 14. If a district without debt merges with a district with bonded indebtedness, are they then jointly responsible for the payment of the same?
- 15. Will there be a decrease or an increase in the tax rates due to re-organization of the districts?
- 16. Will transportation service be successful in spite of many undeveloped country roads?
- 17. Will the transportation of pupils by the school boards result in a personal saving to the farmers?
- 18. Is public school transportation safe?
- 19. Who controls the routing and scheduling of the school buses?
- 20. Will the pupils be required to ride for too great a time on the buses before reaching the school?
- 20a. Will the bus routes be longer or shorter under consolidation?
- 21. Must a school district own its school buses?
- 21a. Can a door-to-door bus schedule be maintained?
- 22. What control is there over the routing, scheduling and operation of the school buses?
- 23. Have rural children had equal educational opportunities in the past?
 - 24. Under reorganization, will kin-

dergarten be available for all children who are of kindergarten age?

25. What arrangement has been made for rural childen who attend kindergarten?

26. Will school district reorganization tend to destroy community life?

27. Will reorganization take away local control of the schools?

28. Will teachers lose their jobs as a result of district reorganization?

29. Will the schools be too distant from the homes of the children?

30. Who will govern the new district, and will rural areas have representation?

31. Is _____ High School an accredited institution?

32. May the junior college students matriculate at the major colleges and universities?

33. Why were there particular areas included in the proposal?

34. Why can't we stay as we are and take care of our own children?

35. Where will the new schools be located?

36. How will all this affect the businessmen?

37. Would it be possible to use the school evenings for adult groups?

38. Would the plan, if adopted, tend to influence in any way the growth in population or the investment of capital by trade and industry in the new district?

Questions raised shortly before an election.

A number of details such as where and how to vote will arise during the last days before an election. At this time, there will be a few persons who need a little encouragement in order to decide how to vote. Leaders strive, therefore, to make a definite emotional appeal in answering questions at this time.

1. Who may vote?

2. Where and when should the voting take place?

3. Who are the men behind the proposal?

4. I have heard that the tax estimates now being circulated by the administration of the school are deliberately intended to be misleading. Is this true?

5. Is it true that the teachers in High School teach only in their major and minor fields?

6. Is well-staffed with teachers for the areas which we define as "special education"?

7. Does — have a full, well-rounded athletic program?

8. How should we vote?

In conclusion, a few statements might be made regarding the most effective methods for informing citizens. At least one comprehensive survey of the educational, social and economic characteristics of the area will be necessary. Where the State Departments of Education do not have personnel for this purpose, usually they will furnish literature which will aid local groups in conducting the survey. Before the plans are made, it may be noted that most questions concern the general nature of school district reorganization. The newspaper through a series of articles extending over a relatively long period of time is most effective here.

Well-informed few instruct others

A few well-informed persons who instruct others through conversation and small discussion groups are also important during this cycle. After a reorganization plan has been developed, printed material loses much of its effectiveness, although an attractive and informative pamphlet may achieve some good. On the other hand, oral methods become increasingly important. Thus, discussion groups, panels, speeches and public meetings should be used more frequently during this time. Indorsements by various leaders of the entire community are quite effective at these public gatherings. Shortly before voting time, simpler media of communications with strong emotional appeal are used. A well-organized program also will give attention to having a group of telephone workers and free transportation on election day.

The

by RUS WALTON

A LTHOUGH EDUCATORS FACE difficult and aggravating financial problems, there are non-monetary costs of learning that also run high. Education's purpose is primarily to help the individual fulfill his potential; to help him understand and appreciate himself, his fellow men and his community.

We live in an age of compromise and conformity; an age which tends to make social and intellectual innovation and exploration unpopular. The price of learning must be measured against this setting.

Second industrial revolution approaches

Many of the features of this age of compromise have been caused by the industrial revolution. How much more compromise and conformity will be demanded by the "second industrial revolution" we are now entering is a matter for conjecture.

Individualism, the full development of the personal potential, creates complexities which are incompatible with the mass procedures in vogue today in government, business, compulsory unionism, and even learning. We do things by the numbers, and individualism is held down lest it disrupt the predetermined flow of things, events and people.

This levelling influence of compromise and conformity is destructive to the true purpose of education. If

This article is based on an address to the annual conference of the California Association of Secondary School Administrators by Mr. Walton, who is assistant manager of the western division of the National Association of Manufacturers.

Price of Learning.

must be computed not only in dollars but in terms of what it costs educators to resist enemies of academic freedom

a person has but to conform, what need is there to be free? If a person is not to be free, what need is there to learn judgment?

True education in an age of conformity exacts its price. Only the educator can answer the challenge, "Are you willing to pay?"

This age of compromise and conformity raises the price of learning and puts added pressure on the educator. He must not only continue to stimulate thoughtful, responsible innovation and exploration, but must also stand firm against the pressures which would have him conform to an oppressive public policy of sameness.

Within the past three or four decades we have developed a new myth, the myth of total security. We have become fascinated by an insatiable drive for higher and higher standards of living.

We need the magic of traditional liberal education to break the spell of fear which creates this insatiable desire for security. The obsession with security indicates that we are afraid and want to be safe from some danger.

Everyone seeks total security

To be frank, I believe some teachers have fallen victim to the myth of total security, believing that if they will just go along with the crowd and acquiesce to popular opinion, their jobs will be secure, their tenures unaffected and their futures assured.

More and more, the myth of total security is affecting the students' ambitions and the price they will pay for learning. Too many are more concerned about learning an established vocation than about studying the fundamentals from which they can spring to exploration, discovery and innovation. They are more con-

cerned that there be a job waiting for them than that they have the spark to create a new job with their talents.

This myth of total security affects the parents' attitude toward education and toward the price that they are willing to pay for their children's education. They too become more concerned that their child be prepared for something which already exists, and into which he can easily fit, than that he be well-grounded in the fundamental truths, so that he can then go on to create, to inspire and to lead.

Fear causes attacks on academic freedom

The attacks against academic freedom are also an indication of fear. Those who would destroy academic freedom demonstrate that they are not willing to allow the risk involved in the search for truth. They do not want to know their mistakes. They want only to be secure in their own logic-tight cocoon, free from demands of change and progress, from the challenge of new frontiers.

We are all aware of the current wrangling over academic freedom. Most of the controversy has centered about the colleges and universities. Not too much has been said about academic freedom in high schools.

Academic freedom has been jeopardized as much in the high school as it has in the institutions of higher learning, though the pressures are much more subtle and the attack may be harder to recognize.

The destruction of academic freedom can come as quickly through subtle pressures and inch-by-inch compromise as it can through outright attack. In fact the destruction can come more quickly through the quiet approach than through the blustering, rancous shouts of fanatics. Many of the pressures on the secondary school come from outside, from those who would have learning conform to the shibboleths of the day, or from those who would seek to have it serve some purpose in keeping with their views.

One of the pressures which has tended to weaken academic freedom in the secondary school is the reluctance of some educators to fulfill the grand purpose of education, the willingness to bow to the whims and wishes of the public, whether individuals or groups.

The educator must answer the question: if I am free to teach, what will I teach? Surface skills? Manual dexterity? Social neutrality? Public agnosticism? The uncertainty of certitude?

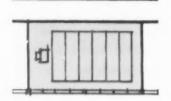
Expediency and conformity are not the tools of education, nor the true standard of exchange in the price of learning.

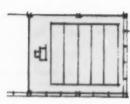
The determination of the price of learning, the value assigned, must rest with each individual and with the various groups.

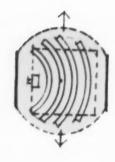
Educators determine price of learning

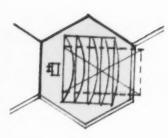
The price of learning must be determined by the educator who will carry on the traditional purpose of helping fulfill the potential of each student who becomes his charge. It must be determined also by the individual student who would be true to himself and would be more than a drone or a stamped-out cog in a giant machine.

The price of learning cannot be met only by dollars and cents, adequate buildings and proper salaries. These are important, but ultimately the price of learning is computed in terms of dedication, purpose, courage and vision. These are qualities educators must have.









The traditional rectangular classroom imposes rectangular seating and allows little flexibility but to shorten and widen the room economically would limit building to one story.

Flexible seating can be provided by expanding sides . . .

. . . to form a hexagon — a rectangle with sides pulled out.

An architect discusses. . .

Standardizing Elementary Classrooms

TAILOR-MADE ITEM - be it a

man's suit or a school building

-is necessarily more expensive than

a ready-made product. However, the

modern school program, like a 7-foot

man, cannot be fitted into a ready-

to-wear garment. The goods have to

be specially cut to size. But let us explore the possibility of standardiz-

ing a portion of our elementary

. . . and suggests how thousands of dollars can be saved on the construction of each new elementary school by a fixed design of the classroom portion

by ARTHUR F. DEAM

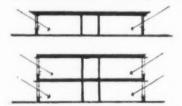
school buildings—the classrooms.

We once did have a standardized schoolhouse. Some of these are still standing and a few are still in use. This was the square two-story (four rooms above four) white frame or red brick schoolhouse readily identified by its crowning cupola. In its time this plan, with its eight rooms and basement, was considered fully adequate and was economically duplicated in towns all over the country.

But this stereotype became outmoded shortly after World War I. The advent of the six-grade elementary school, and special rooms such as gyms, cafeterias, all-purpose rooms, etc. (which varied from 5 percent to 50 percent of the total school) plus a new stress in daylighting necessitated the tailor-made school. In other words, each school had to be individually designed in terms of the community's enrollment, its educational needs and its climate.

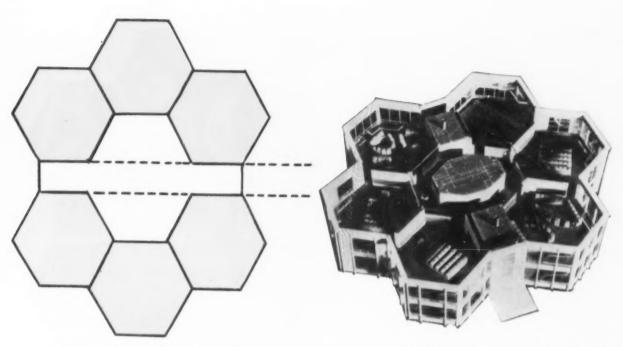
In terms of design, the school came down from its Victorian perch and assumed new shapes. These were generally developed as various solutions to the problem of providing adequate natural lighting. These plans fell into several categories:

1. Double-loaded corridor, with



THE SCHOOL EXECUTIVE

Mr. Deam is professor of architecture at the University of Pennsylvania. He has designed a number of schools in the Philadelphia area and has worked as architectural critic on hundreds of school design projects. A winner of the Prix de Rome in 1923, he writes that "My convictions, and this standardization, are the result of 30 years of experience." His Philadelphia address is 1915 Rittenhouse Square.

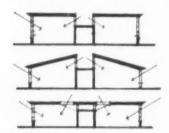


The hexagonal-shaped classrooms are fitted together by a framing method consisting of 3½ units on either side of connecting strip, providing 6 classrooms to a floor, 12 to a 2-story unit. Center hexagon accommodates traffic, utilities.

View of model, with roof removed, of 2 story classroom unit. The 6 intermediate classrooms shown illustrate variety of seating arrangements in 35-pupil rooms. Primary classrooms on first floor can vary from these in detail. Stairwells are at ends of strip.

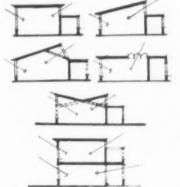
rectangular classrooms on either side of a central corridor. Applied to both one- and two-story buildings, it provided natural lighting on only one side of the classroom while the corridor was artificially lighted. Though generally economical to construct, the double-loaded corridor plan cannot provide like orientation in all the classrooms.

2. Double-loaded corridor with



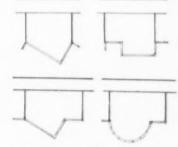
various methods of providing natural lighting on the corridor side of classrooms. Most examples are one-story. Various kinds of clerestory and sky-lighting devices are used to admit daylight. These provide good natural illumination in all parts of the classroom thus permitting flexible seating arrangements. The principal criticisms are the excessive construction costs and the high maintenance cost of the natural-lighting devices.

3. Single-loaded corridor with



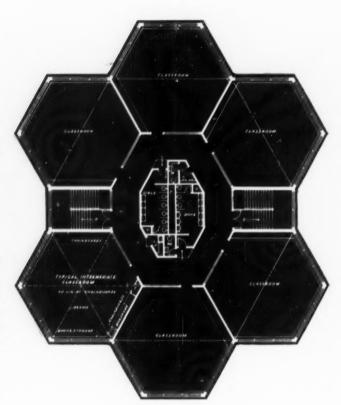
clerestory or skylighting devices on the corridor side. Most examples are one story; classrooms all face in one direction taking advantage of best orientation. This plan provides pleasant day-lighted rooms and is most efficiently used in small schools. The disadvantages are the necessary length of the corridors and the distance of travel to special rooms. It is uneconomical in large installations because of the large proportion of corridor space, long lines for mechanical requirements and excessive construction and maintenance costs.

4. Variations in sizes and shapes



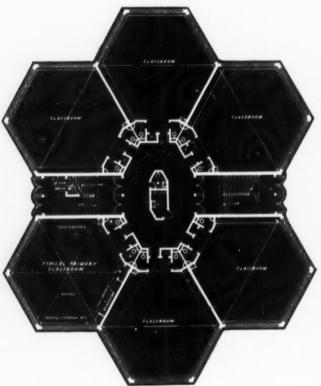
of rooms in an attempt to improve natural lighting and increase interior floor plan of the 12-classroom unit

Intermediate classrooms are on the second floor and open directly to circular corridor which surrounds toilet facilities. Three walls in each classroom are window walls with books and storage space below windows; the other three walls accommodate chalkboards and wardrobe. The two fireproof stairs satisfy all state fire codes.



Primary classrooms on the first floor may be planned independently of the intermediate grades. Plan at right shows classroom similar to plan above except that it extends into center space to accommodate boys' and girls' toilets at entryway. Detail below varies further: each classroom has door opening directly to out-of-doors; extension into center space is for workroom and single toilet. These variations in detail are all possible within the standardized framing method.





THE SCHOOL EXECUTIVE

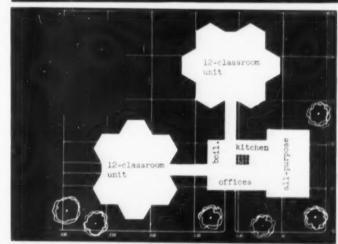
how a school can grow from a 12-classroom unit

The 12-classroom unit plus offices, boiler room and connecting corridor can serve as a start. At estimated cost of \$200,000 for the unit plus \$42,000 for the other spaces, here is a school for \$242,000.

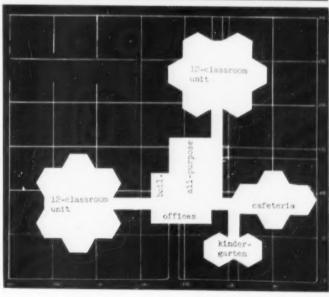
12-clausroom unit offices

12-cinsaroom unit offices in

Add to the above plan an all-purpose room and kitchen facilities at an estimated \$81,000 and here is a 12-classroom school for \$323,000.



To the above plan add another 12-classroom unit with its connecting corridor for \$206,000, and here is a 24-classroom school costing \$529,000.



Cafeteria and kindergarten, built in unit pattern, are added to above components, but layout is greatly altered. This 24-classroom school, with 2 kindergartens, cafeteria and kitchen, all-purpose room, offices and boiler room, would cost an estimated \$618,000. These planning methods illustrate how the assembly of the standardized classroom unit with special room requirements would give each school an individual appearance.

standardizing elementary classrooms

flexibility. These are found in both double- and single-loaded corridor designs. Used primarily in one-story schools, these plans offer many advantages.

All the plans in these four categories are tailor-made with the consequent difference in cost compared to a ready-made item. The writer believes that it is now possible to evaluate the advantages and disadvantages of the many methods of planning and to formulate a method of providing good schools at a more reasonable cost.

First find optimum design

In other words can we not achieve an optimum design for a classroom (which need not vary from one community to another except in number) and standardize that in order to effect economic duplication? Such a standardization could apply only to the classroom portion of an elementary school of course, since the special rooms will always vary in size and number from school to school.

In our quest then for an elementary classroom of the size and shape that would serve as a desirable prototype for any community, let us analyze the physical requirements of the classroom—keeping in mind the difference in requirements of a primary group (1st, 2nd and 3rd grades) and an intermediate group (4th, 5th and 6th grades).

Rectangle is confining

To begin with, let us set up a near ideal condition: a flat grassy area, a 70° to 75° temperature, large shade trees and ample outdoor space for the teacher to arrange her class of 25 to 30 pupils. No one would confine them to an arbitrary 15' by 30' rectangle. If the activity were recitation, the group would cluster in a semicircle around the speaker. Or if several groups were working independently, they would be scattered at equal distances from the teacher.

This belief in the inability of the

simple rectangle to provide for the varied activities of today's classrooms was the motivation in planning the various classroom shapes described in the above category #4.
Some of these innovations were entirely successful and made a strong contribution toward a scientific solution of classroom requirements.
From the point of view of cost, however, some of these solutions are beyond the financial capabilities of many communities.

Shape must permit grouping

The problem then is to provide the best solution for the requirements of a classroom unit, with full appreciation of the architectural and economical problems of grouping the units together.

What is a satisfactory, functional shape for a classroom? To get back to our outdoor classroom, it would seem that a circle would be the most functional shape. However, we have to fit in such rectilinear classroom fixtures as chalkboards, wardrobes and bookcases; and we have to group the classrooms together. What shape then would preserve the seating flexibility of the circle, provide a rectilinear wall space, admit light through more than one classroom wall, and be adaptable to grouping? The hexagon.

Starting with a hexagonal classroom, it is possible to effect a framing method that consists of three
and one-half units on either side,
with a connecting rectangular strip
between, totaling six classrooms on
a floor. This plan can be one-story,
or another six classrooms can be
similarly fitted together on the second floor. Detail can vary between the
two floors with the first-floor classrooms (primary grades) having individual toilets and outside entrances.

12 classrooms in small area

The greatest economies are gained by providing twelve classrooms in the minimum cubic content on two floors—the primary group on the first floor and the intermediate group on the second floor. The exterior wall is a curtain wall and may be constructed in one of many different materials and with a choice of various textures and colors. The eighteen exterior walls are all identical—a maior economy.

This standardized classroom portion can be easily used in conjunction with any number of special rooms. The connecting rectangular strip becomes a corridor leading to the specially-tailored cluster comprised of the gym, cafeteria, multipurpose room, etc.

The simple and aesthetically satisfying form of the classroom unit, with its projecting bays, is given compositional interest when grouped with this separate cluster of special rooms. Therefore, though the unit is standardized, no two schools need look alike because of the wide choice of construction materials and the infinite variations possible in grouping the unit with the special rooms.

This standardization proposal, then, offers these advantages:

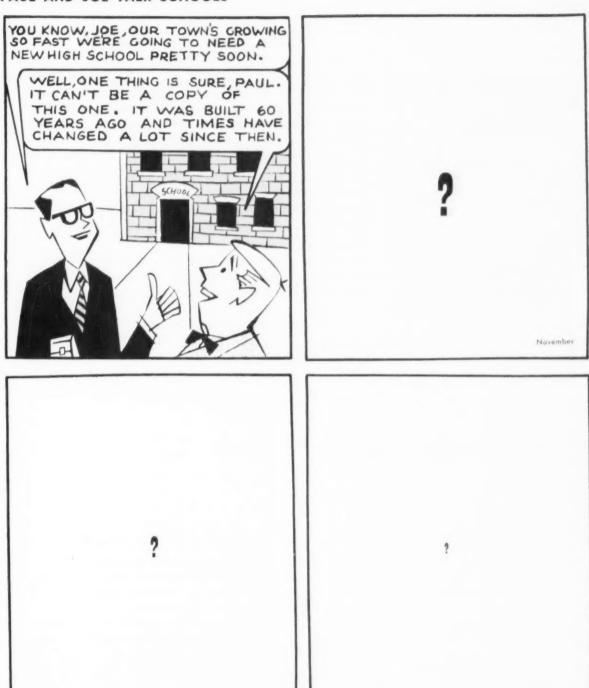
- 1. Three sides of each classroom are exposed to daylight, thus minimizing the problem of orientation,
- 2. The corridors are of minimum length,
- 3. The plan permits flexible interior arrangements,
- 4. Utilities are centrally located with minimum length of ducts,
- 5. Basic planning idea and construction method permit economic duplication.

It is estimated that the 12-classroom unit can be constructed for \$200,000, though this figure might be low for the building of the first few units. It is further contended that this standardization would realize a saving of \$4000 per classroom over the method now in use in elementary school design and construction.

To further the possibility of increasingly economical reductions of the construction costs in future buildings, a patent* has been received on the design and one has been applied for on its construction method. With the classroom portion of elementary schools varying upwards from 50 percent of the total building, effective savings could be realized by communities whose school boards adopt this standardization method.

^{*} D 172-340

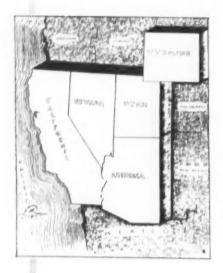
PAUL AND JOE TALK SCHOOLS



The School Executive Will Deal With the Secondary School Problem in a Forthcoming issue

December

January



During the past two years, The School Executive has described the programs in various sections of the country which have been connected with the Cooperative Program in Educational Administration. In this issue, we present the program—with some of its results—which has been conducted in the Pacific Southwest, centered at Stanford University. William R. Odell, director of the Stanford Center, and a group of his associates have prepared the materials presented on the following pages. Even the casual reader must be convinced that a great effort is being made today to improve the quality of school administration. The editors believe that as a result of the CPEA programs much more improvement will occur in the days ahead.

the pacific southwest cpea

As have the other seven centers, the Stanford Cooperative Program in Educational Administration has by this time developed many facets and spread in many directions. Only a few highlights of the program can be touched upon here, but a good overview of the major features can be presented. Interested readers are invited to write for more details about any aspect of the program that is of interest. Three main endeavors were conceived at the outset for the Pacific Southwest CPEA region: (1) state-wide and regional field endeavors, (2) university interdisciplinary endeavors related to improved administrator education programs, both pre-service and in-service, and (3) concern over the selection and induction of novitiate public school administrators. Emphasis in this series is upon accomplishments as best they can now be identified and described. Accordingly six elements of the program are told by six staff members who in each case were closely identified with the particular undertaking. These six matters are: 1. Pacific Southwest regional and state-wide programs; 2. interdisciplinary activities; 3. the Stanford school planning laboratory; 4. the Stanford University internship program in school administration; 5. a service project in administrator selection; 6. research activities at Stanford.

regional and state-wide programs

- · community study procedures
- · administrator certification
- · county administrator activities

F OUR MAIN ACTIVITIES have been carried out cooperatively by the Pacific Northwest and Pacific Southwest areas on a regional basis.

The first of these projects coasidered the procedures used in local community studies as developed in the various disciplines of sociology, public administration, anthropology and political science, and their relationship to the conducting of school systems. This project was planned and carried out by Professor Theodore L. Reller of the University of California.

Representatives from about 30 school administrator-training institutions in the nine far-western states attended a conference in Berkeley in October, 1953, to review specific community studies. These included the Bay City Study carried on by the Harvard CPEA, the Junction City Study by the Oregon CPEA, a study of Washington, D.C. community power structure as revealed through the study of racial segregation, and studies of the internal administrative structure in industry, in public power projects, etc.

The second regional study dealt with the problem of state administrator credentialing procedure. Representatives from ten western states met in Berkeley last June for a conference chaired by J. Burton Vasche, associate superintendent of public instruction in California, and coordinated by Edgar L. Morphet of the University of California.

This conference group considered the problems of administrator certification, but more important it initiated an agency for discussion of this and common problems by western state departments of education. A representative from each of the states will be designated and a meeting will soon be held for further consideration of common problems for joint consideration by various state departments of education.

The third regional project consisted of activities related to county school administration. During the past three years several meetings have been held and numerous meetings of county administrators have been attended by CPEA representatives. To a large extent the programs have been carried on as a part of the State County Superintendents Association already in operation. Annual reports of the Pacific Northwest and the Pacific Southwest CPEA describe these activities in considerable detail.

Present practice and training

And finally, Professor John F. Staehle of Montana State University has substantially completed a monograph describing the present status of public school administration practice and collegiate training programs in the nine western states. This is to serve as a description of initial conditions when the CPEA program began and as a bench mark against which to measure developments in the years ahead.

The Pacific Southwest area during the last two years has organized a regional planning committee, comprised of two representatives each from Arizona, Nevada, Utah and Wyoming, and five from California. The committee's function has been to consider CPEA activities under way in various state programs and to provide, for the first time, an agency for wider concern in the Pacific Southwest area of common problems in all of the states. As a result of this regional committee, plus the cooperative undertakings with the Pacific Northwest CPEA region, real progress has been made in finding avenues for joint consideration of common problems among the far-west-ern states.

States look at own problems

In addition to the regional concerns, each of the five states in the Pacific Southwest area undertook programs related to their respective current problems in public school administration. In each case a state committee was created to direct the activity and to provide representation on the regional planning committee.

In Arizona, the problem selected was in-service education of school administrators. During the past three years, summer conferences at each of the three administrator-training institutions, and professional association

by WILLIAM R. ODELL, director of the Pacific Southwest CPEA Center and professor of education, Stanford University.

conferences at other times during the year, have been developed in line with this concern. In each case appropriate conference leaders have been provided from CPEA staff and funds.

In Nevada, an experiment was undertaken to determine the effectiveness of an in-service training program for school administrators in isolated sections of the state. Tape-recorded professional discussions were distributed through the School of Education of the University of Nevada and the Nevada Superintendents Association. In addition, assistance was given in formulating plans for a state-wide study of the Nevada educational system. A governor's commission was created and an appropriation was provided by the legislature for this purpose. During the past summer a workshop conference at the University of Nevada for school administrators was supported in part by CPEA funds and staff members from the administrative center.

Utah examines instruction

In Utah, the state committee selected as their area of concern the instructional role of school superintendent and administrator. Three summer conferences have been held alternately in each of the three administrator-training institutions in the state. During the past two years,

in addition, pilot studies in several communities have been carried on by staff members from the three training institutions. In each center the concern has been that of determining more effective ways for professional and lay participation in the evaluation of local educational programs.

In Wyoming, the state committee selected the problem of preservice and in-service training of small-community school superinendents. Several project centers have been established and studies of these have been carried on cooperatively by the Superintendents Association, the School of Education of the University of Wyoming, and graduate students.

In California, the California Commission on Public School Administration was created. It has carried forward a study, just now ready for publication, of the relative roles of state, intermediate district, and local district administration of public education in California.

Diverse as the topics of study are in the five states, the underlying concern in each case has been the development of an agency for the effective cooperation of state departments of education, school administrator-training institutions, and professional associations concerned with public school administration in their joint continual study of common problems.

the pacific southwest cpea-2

interdisciplinary activities

- · political scientists study local government
- · sociologists study district sizes
- · journalists study communication

The structure of public education in the United States has been founded upon the premise that any social function involving the immediate needs and welfare of the people should be administered by agencies which are subject to the direct control of the people. The men who framed the American Constitution and provided the concepts for our democracy recognized that a republican form of government predicated upon popular control of the instruments of government required a highly educated populace for its success. Public education became essential as a means for effecting broad social goals and of achieving constantly more perfect instruments of popular control of government. Yet, it was not until the twentieth century that educators them-

selves became fully aware of the nature of educational policy as social policy.

Some vital questions

This awareness, however, brought confusion rather than order to educational theory. Does this unique function of education in American democracy, as the Educational Policies Commission called it, give to the educator a unique role in the social fabric? Is it the educator's role to help frame the goals of society and, as Counts asked, to dare to change the social order? And if the school administrator holds a unique position in the educational structure, what is his role in relation to other aspects of government and other functions of society? How does he perform as the educational official who is charged with the responsibility for effecting certain aspects of social policy? How does the public maintain the accountability of its public school officials?

The answers given to these questions have never been

by KEITH GOLDHAMMER, acting assistant professor of education, Stanford University.



Stanford group at discussion of their interdisciplinary program: (from left facing camera) Paul R. Hanna, professor of education; Douglas Merritt Whitaker, provost of Stanford; Ernest R. Hilgard, dean of graduate division; J. E. Wallace Sterling, president of Stanford; Maurice Seay, educational director of CPEA; I. James Quillen, dean of the school of education; and Robert Richardson Sears, professor of psychology and education.

fully satisfactory, and with the development of the program and activities of the Cooperative Program in Educational Administration, it became apparent that one reason why the answers were not satisfactory was that no one had as yet adequately defined the position of the administrator in the social fabric which was his arena of activity. This awareness led the Pacific Southwest CPEA, along with other regional centers, to the development of projects which involved the participation of many social scientists who could employ the methods and concepts of their particular disciplines to the development of deeper insights and the setting of more meaningful directions. The dirth of sufficient data upon which to generalize led, inevitably, to an emphasis upon research.

Two directions seemed possible. First, some centers approached the problem by constituting interdisciplinary teams which made a concerted attack upon various problems by group involvement cutting across the individualized boundaries of the various social science disciplines. Second, other centers involved the disciplines on an individual basis, feeling that the educator himself should make the analyses of the data which the social scientists presented.

Took individual approach

It was along this second route that the interdisciplinary activities at Stanford were developed. Various departments of the division of social sciences were asked to formulate research proposals as their direct responsibilities in the developing program. The guidance and support of the individual projects became the cooperative responsibility of the representatives of the individual departments and of the CPEA staff. Space will permit only a few illustrations of the projects which were developed.

Representatives of the Department of Political Science undertook a study of the relationships of schools and other aspects of local government in order to examine the significance of different relationships between schools and these governmental units in order to define the community functions of the superintendency, determine the manner in which various pressure groups influence educational policy, analyze the extent to which citizens endeavor to establish educational goals for their children, and interpret in the light of these data the types of programs the schools can realistically provide for children.

The research in this area is continuing, but preliminary findings indicate that the maze of intergovernmental units on the local level constitutes a major obstacle to effective citizen participation. It has tentatively been concluded that the integration of all governmental units on the local level might result both in greater citizen participation and in more effective governmental operations. Those who have been involved in this study believe that the school administrator needs a broader training than he now receives in order that he might more intelligently and effectively deal with general governmental problems which involve the program, financing, and general operations of the schools.

Administrative chores grow with district

Representatives of the Department of Sociology became engaged in a study of the degree to which the size of the educational organization influenced the proportion of the personnel of the organization whose efforts were devoted to administrative functions. It was felt that the size of a school district undoubtedly influences the character of the activities in which the personnel of the district engage. It was hypothesized, as the basis for the research, that "the relationship between the size of an administrative component and the total size of its containing organization is such that the larger the size of the containing organization the greater will be the proportion given over to its administrative component."

A stratified sampling of school districts in California was undertaken. Data were analyzed for school districts classified as small, medium and large; it was determined for all types types of school districts that the proportion of personnel whose functions were administrative rose with the size of the district. Research is continuing in

Frederic W. Terrien and Donald L. Mills, "The Effect of Changing Size Upon the Internal Structure of Organizations," The American Socialogical Review Insurar, 1955.

order to determine the qualitative nature of the differences involved.

A third illustration of the research that has been undertaken is found in projects developed through the Institute of Journalistic Studies. One project endeavored to discover the attitudes of superintendents of schools toward newspaper treatment of education, the perceptions of these superintendents of the channels they may use in communicating with the public, and the degree to which the news items which the superintendents feel are newsworthy meet the criteria of newspaper editors.

Sample views of educators, editors

The study was undertaken through questionnaires sent to administrators and newspaper editors in California. It was discovered that the average California school superintendent believes that education news coverage is fair, but that desirable stories about schools are crowded out in favor of more sensational items. They also believe that news coverage of educational events is restricted by the reporter's lack of understanding of school problems. Approximately 90 percent of the superintendents stated that editorial comments in their local newspaper were generally favorably disposed toward the public schools.

It was concluded from this study that more important than newspaper coverage in keeping the public adequately informed is personal contacts of school people with citizens of the community. Superintendents rate news reports carried home by school children as equally important as newspaper stories, while radio reports and student publications are rated as the media in which the public has the least confidence.²

A second study of the institute is in process of tabulation. It involves the measurement of the attitudes of the public in a California school district during the campaign of a school bond election. Five hundred persons were interviewed, and the data thus secured were analyzed on three scales which were designed to tap successively deeper attitudinal layers—attitudes toward school financial problems, general attitudes toward the schools, and covert attitudes toward public schools and education.

Space does not permit the description or analysis of all of the projects undertaken at the center. These activities have had two noticeable effects.

First, educators have been helped in seeing the broader implications for society of some of their own activities as well as of some of the relationships within the community which arise out of the operations of the public schools.

Second, social scientists have become aware not only of important educational problems but also of the field of education as a laboratory in which to analyze social phenomena.

The extension of these activities and the development of more penetrating research projects should result in the attainment of deeper insights which will have significance not only for education but for all social relations.

the pacific northwest cpea-3

school planning laboratory

- displays of building materials & equipment
- coordinated classroom
- · library of school planning materials

ONE OF THE CHIEF concerns of all CPEA centers has been the analysis and improvement of the methods and content of in-service as well as pre-service programs of training for school administrators and school board members. In this regard, one of the major resources of the Stanford program is the School Planning Laboratory. This combines the current concern of those responsible for developing exacting school programs with availability

of useful resources at a University, so that the field now looks directly to the training center and its resident staff for practical assistance.

Displays with a purpose

School planning activities are centered in the Laboratory which occupies approximately 6,000 square feet of School of Education space. Physically, the Laboratory consists of functional displays of a wide variety of modern building materials, furniture and equipment. The fundamental importance of the Laboratory is the use to which it is put, since displays, without structure and program, are relatively meaningless, however inter-

by JAMES D. MacCONNELL, associate professor of education and Laboratory director, Stanford University.

[&]quot;Roy F. Carter, "The Press and Public School Superintendents in California," Journalism Quarterly, Spring, 1954.

esting. The Laboratory was conceived and instituted as a means of aiding schools to obtain optimum physical facilities.

The stair-well, leading to the Laboratory, is partially treated with a new type of suspended acoustical tile, installed so that visitors can see its effect. Reverberations are marked in the untreated section, and well-controlled under the tile.

Exterior materials shown "outdoors"

Immediately off the entry is the exterior materials section, in which various roofing sections and exterior wall treatments are installed. A planting area, in which specimens are changed periodically, strengthens the "outdoor" impression.

The approach corridor to the Coordinated Classroom has one wall treated with light-directional glass block, with cutaway sections so that installation methods are apparent. Primary light source for this corridor is a battery of "exterior" lights which simulate natural daylighting.

The Coordinated Classroom contains various materials and inserts for conducting lighting, heating and ventilating demonstrations. The room is furnished with various modern tables and chairs, and is carefully decorated and treated to provide an optimum learning environment. It is used as a seminar area.

The conference area leads off the foyer-exterior materials section, and contains different types of modern conference tables and chairs, and is actively used for various small conferences. Lighting is with one type of luminous ceiling, of which there are some eight or ten different types throughout the laboratory.

Part of the same general space as the conference area is taken up with the library and secretarial area. The school planning library consists of a wide selection of printed materials related to the field, plus a card file containing summaries of some 5,000 different articles on school planning and materials.

The work area leads into the board room, most recently completed of the Laboratory spaces. This room, with its luminous ceiling, plastic tile floor and generous storage, is headquarters for the School Planning Laboratory field service activity.

A complete science facility is presently going into a space adjacent to the work area and the board room, and will contain new and functional science furniture and equipment,

Demonstrate light and color

The fundamentals laboratory contains many different kinds of school furniture. The ceiling consists of ten different kinds of acoustical tile, the floor of six kinds of floor covering, and the walls of twelve kinds of covering. A light and color demonstration unit will be installed in one end of the space. It is used as a classroom, and for showing films and slides on school planning.

A study room, containing study cubicles, a materials



Administrative trainee demonstrates unit ventilator model.



Classroom in lab displays furniture, equipment, wall tiles.

file and a conference space, is adjacent to the fundamentals laboratory, and is used primarily as a graduate student study area. Each of the cubicles is treated with different wall, floor, and ceiling coverings, and the lighting is different in each. The main part of the room is treated with different floor, wall, ceiling and lighting installations. Drawing tables, relatively self-contained and developed through cooperation between Laboratory personnel and a manufacturer, are on display in this room, as is a wall-type cafeteria table.

Can compare performances

Throughout the Laboratory, real installations are the rule, so that it is possible to see the performance of various materials and to use the furniture and equipment. This same rule applies in the shop area in which various pieces of equipment have been installed; these are used by Lab personnel and demonstrated to visitors.

Nearly all of the installations and equipment have been put in at the expense of various manufacturers, who constantly replace obsolete materials with their newest product. Laboratory policy, however, is such that there is no commercialism with any of the materials. They are there so that interested people—board members, architects, lay visitors, administration students and school plant specialists—can see, use and evaluate these materials. The Laboratory makes no brand-versus-brand evaluation, although some of the research projects have to do with the solution of certain school facilities problems.

The Laboratory is widely used in the professional training program, not only for administrators and planning specialists but also for teachers. Teacher trainees visit the Laboratory, where they are introduced to certain aspects of heat, light, ventilation, furniture and equipment. Some of the teacher groups make extensive use of the Laboratory shop in certain of their courses requiring tools. Architectural students make periodic visits to the Laboratory, thereby becoming acquainted with some of the materials and equipment used in school construction.

Learn techniques of planning

Administrative trainces are required to take one course in school planning in which they extend far beyond familiarity with materials to consideration of the techniques of cooperative educational planning. Theory and lecture aspects of school planning courses are augmented by actual field experience on a current survey; the trainee thus receives direct experiences in population projection techniques, site selection, financing, and educational specifications. Specialists in school planning are exposed to all phases of educational planning, including both theoretical and field work.

Basic to all educational planning is the educational

program. Everything that is learned is aimed toward improving and helping the educational program in the schools. Specialists in school planning as here conceived are concerned with material things only as these materials serve the educational program.

The Laboratory also contributes to the training program by sponsoring research in which various physical materials are investigated as to educational use, value and application. Results of such research are published either in the various Laboratory publications or in the monographs in the recently inaugurated Stanford Educational Administrative Series.

800 visitors a year

During the course of a school year as many as 800 school board members and architects will visit the Laboratory to see the various materials which have been installed, and to talk over their own problems with Laboratory personnel. Teacher groups, especially from districts engaged in a building program, are frequent visitors; some districts have arranged to have all their teachers take conducted tours through the Laboratory.

During each summer session, a School Planning Conference is sponsored by the Laboratory. Attendance at such conferences exceeds 200 architects, superintendents, board members, and graduate students in school administration. During the year various conferences are also held, the last of which was the Illumination Engineering Society Conference in April, attended by more than 150 engineers, architects and superintendents who considered the use of luminous ceilings in schoolhouse construction.



James D. MacConnell (left) talks over school planning problems with two staff members. The Laboratory was designed to help schools obtain optimum physical facilities.

internship program in administration

- · experience with fundamental problems
- · contracts with school districts
- · work with successful administrators

THE TOTAL APPROACH to educational administration is many-faceted. It involves such things as early and adequate selection and recruitment, preprofessional preparation, course content and sequence, and general areas of competency including those from interdisciplinary contributions. It further implies a continous growth and develoment after the period of formal training.

One of the most important aspects of this total administrative training is in the intermediate stage of employment, after initial administrative positions and prior to top administrative positions. At this stage, potential top administrators are selected and trained for greater administrative responsibility through further developing the qualities of leadership; providing additional technical skills in such areas as personnel, instruction, guidance, business administration, plant facilities, elementary, secondary, and general administration; and presenting an overview of educational administration and education generally.

Have experience as principal

The Internship Program that has been developed at Stanford University through the CPEA makes a major contribution to this important intermediate stage of development. Although the internship can be applied at any stage of teacher or administrator development for the next step ahead—and some programs do use the internship as a preparation for initial administration—the Stanford Program uses it in preparation for general-administration, after-principalship experiences. Typically, pre-intern trainees have had intensive training and some experience in elementary, secondary, or guidance administration. The intern phase, as here conceived, aims for the development of the broader central office administration competencies.

This training is aimed to provide practical experiences in operational administrative procedures. Activities are built around bonafide school problems which are fundamental rather than superficial. Resource people, with varying specializations, are available for consultation as well as for scheduled presentations.

Screen prospective internes

Beginning administrators who have had adequate training and experience and who appear to have the potential to become top-flight administrators are carefully selected for participation in the Internship Program. It is believed that careful selection and screening is one of the most important aspects of upgrading the profession.

Before a candidate is considered for an internship, it is necessary that he have a valid California School Administrative Credential, preferably the general administrative credential. He must have had a minimum of two years of successful administrative experience and he must provide a history of successful instructional and community leadership. It is presumed that he will have an M.A. degree, or equivalent. These trainees must be sponsored by their home districts; it is expected that this sponsorship will increasingly take the form of a developmental leave whereby the home district subsidizes the trainee for a year's advanced training.

Two-year program leads to degree

During the second consecutive year, the most promising of the trainees will be selected for internships. The total two-year program will provide additional administrative competencies in several areas, including elementary administration, secondary administration, guidance administration and general administration. Upon completion of the two-year program, interns would normally expect to receive Ed.D., Ph.D., or Ed.S. degrees, and would obtain positions as superintendents, assistant superintendents, business managers, or specialists in planning, personnel, research, guidance or curriculum. Some of the interns would have the superintendency as their ultimate objective, while others of them would be more concerned with top administrative positions in their specialities.

The heart of the internship program is a direct con-

by JON S. PETERS, coordinator of the Internship Program, Stanford University.



Three Stanford interns study school planning exhibit. During their period of internship they will be involved in practical administrative tasks, from discovering problem and collecting data to making and effecting policies.

tractual relationship between the intern and the school district, in which the intern is expected to put in approximately half time with the contracting district, and the remainder of his time writing his dissertation. Although the institution screens and recommends, the actual and legal contract is between the intern and the district, and any alteration of such contract has to be worked out between the two.

Devotes year to district and dissertation

It is presumed that by the time a trainee receives an internship appointment he will have completed most of the required course work and be relatively free to devote his time to the school district and to his dissertation. In some cases, the dissertation will evolve from his experiences in the school district, but only if it is mutually agreeable. The internship is not primarily conceived as a source of dissertation materials but rather as a learning situation for the intern.

The internship program must be mutually advantageous to both the intern and the school district involved. The intern must receive valuable training and the district must receive value in full for its expenditure, although it will also receive collateral advantage in making a significant contribution to the upgrading of educational administration generally. Likewise, because of University involvement and sponsorship, it is essential that the program do what it is intended to do: provide meaningful and practical experiences for the administrative trainees.

The intern must be willing to accept the conditions of employment as laid down in the contract, and must abide by them. For example, he cannot accept employment for another position without first being released by the contracting district. The institution has a responsibility to guard against any exploitation of interns.

Generally, interns will work in the central office, directly under the superintendent or one of his top assistants, thereby gaining rich experiences which will aid in rounding out the trainee's total administrative training. Activities and experiences are built around genuine school problems. The whole concept of the administrative training program is to make wide use of the rich resources in sound educational administrative practice as is increasingly found in the field.

It is expected that interns will be involved in certain administrative problems throughout the entire period of service, from the discovery of the problem and the collection of data, through the making of policy and the putting into effect of the particular finding.

Interns will work only with effective administrators who have an awareness of their social responsibilities; these must be men of personal integrity and fundamental character who can instill something of the basic worth of their work into the trainees. Selection of good trainees and good administrators is the key of the whole internship program. However, careful selection alone is not enough; there must be a careful matching of interns competencies and needs with the various district situations so that the entire program can work to the advantage of all concerned.

Includes broadening activities

Although the field work phase of the internship is of paramount importance, it is necessary that there be other concomitant activities. Thus far, these other activities have taken the form of a seminar class which provides continuity, breadth and evaluation.

A key part of the seminar activities consists of presentations by certain carefully selected field administrators who are willing to devote blocks of their time to furthering educational administration. The presentations are not bookish, but rather are vitally dynamic, and they are invariably followed by vigorous discussion on the part of the interns and the staff. As in the case of field experiences, the problems considered by the seminar have to do with broad and generally applicable principles instead of local trivia.

Field administrators, in their substantial contribution to this phase of the administrative training program, have their counterparts in the field of medicine where practicing M.D.'s donate blocks of time to the instructional program. It is hoped that this activity will increase in the future.

project in administrator selection

- · participating school systems
- testing program for candidates
- · report-back conferences with staffs

THE EARLY DISCOVERY of promising trainees for school administration from among teachers concerns all school systems and administrator-training institutions as well as the prospective administrators themselves. Some teachers should be urged to consider training for administration and others should be discouraged. But which are which is a problem that needs careful study.

This matter represents one of the chief concerns of the Pacific Southwest CPEA center. Much time has been devoted to its study, and some promising beginnings have been made at least in the clearer definition of some ramifications of the problems.

In the beginning, several project-center school systems were selected for long-term cooperation in the selection and induction of school administrators. These included: Alameda, San Jose, Phoenix Elementary, Phoenix High School and College, Tucson, Fresno and Sacramento, and the California counties of Santa Clara, San Luis Obispo and El Dorado.

A careful study was undertaken of selected candidates for administrative positions in these school systems which will be continued over a span of years. But more recently the attempt has been made to adapt the techniques and knowledge developed in these centers to the problem of selecting school administrators in other systems that wish to extend their present selection procedures to include some outside evaluation assistance.

Provides service for local areas

The large-scale group testing of candidates for administrative positions in school districts was originally planned as a fairly rigorous research project. In actual practice it was found to be very difficult to maintain desirable research standards, since participating school districts were much too eager to obtain the test data and to make immediate use of it in the selection of administrators. Although certain research data have been obtained and much has been learned, the project increasingly is a

service activity. As such it appears to have great promise as a method for improving the local machinery of selecting school administrators.

The basic pattern of study so far evolved includes the administering of a test battery to the candidates and, then, a careful report-back conference with the local administration staff after careful analysis of the test and other data available about the candidates.

Test battery to be modified

The battery of tests at present requires approximately eight hours of testing time. The tests were selected on a priori grounds as offering some reasonable possibilities of usefulness. They include a difficult test of abstract verbal "intelligence," a test of general information on current affairs, two attitude tests, two tests of values and interests, two "personality" tests of the projective type. There is also a fairly long personal questionnaire which contains some open-ended questions. A rating of ability at written expression is made from various materials in the test battery. There has been some experimentation with tests of administrative information, judgment and decision-making. Further tests in these areas are being developed.

The battery of tests represents a tentative and temporary selection. No special claims are being made for these particular tests: they appeared to be logical possibilities and worth trying. The test battery will be changed or modified as statistical evidence on reliability and validity is obtained and as local school districts are able to formulate more exactly what they desire in a candidate for an administrative position.

Test data not the whole truth

A number of urban school districts are cooperating with the Stanford staff in this project. The staff avoids either selecting candidates or dominating local selection policies. Furthermore, there is an attempt to minimize the importance of the test data. The local school district and the candidates are told that we do not have the answers to many questions about the selection and the competence of administrators, that we are learning and experimenting, and that we do not wish the test results to be

by MERLE H. ELLIOTT, director of research for the Oakland Public Schools and research assistant, Pacific Southwest CPEA.

given undue weight. Several of the school districts have officially announced that taking the "Stanford tests" is neither a necessary step nor the only route to appointment as a school administrator.

It is evident that much of the value of this project lies in the method of reporting back to the school district. The present method involves a discussion and a sharing of information. Members of the Stanford staff, representing educational psychology, clinical psychology and educational administration, meet with a small group of the local administrative staff. Each one endeavors to supply as much information as possible. It is recognized and clearly stated that there are many types of information that cannot be obtained from pencil and paper tests. Such information must come from local sources. The emphasis in these reporting sessions is upon trying to verify, weigh and correlate various kinds of information.

Experience in these reporting sessions has had an effect on the project staff as well as upon the school districts. The Stanford staff has had to face the limitations of their tests, to try to understand what their tests are really measuring and to translate test scores into more meaningful reports. Discrepancies between test scores or between a test score and reported behavior of a candidate frequently require explanation and raise questions for further study.

Districts now more selective

At the end of the second year of this project, several developments are taking place in the participating school districts. There is, first of all, a recognition of the need for more kinds of information and more systematic collection of information. Questions about candidates are raised in the reporting sessions which cannot be answered without further facts. Some school districts have decided that they do not know their candidates very well!

There is also a tendency for the school district to ask more penetrating questions about the kind of persons it wants for administrative positions. At first this question is raised in relation to the test results: level of intelligence, kinds of attitudes, extent of general information and so forth. It is expected that these specific questions will gradually lead to real studies of the qualities and competencies desired in the school administrator and to the establishment of more systematic personnel procedures.

It is not possible to prove that better appointments are now being made as a result of this Stanford project. It is certain, however, that more thought and time are being given to a careful weighing of the various candidates and their qualities and qualifications. There is an increasing awareness by local school staffs and board members of the need for varied kinds of information and recognition of the present lack of some kinds of information. By the second year the local people tend to know more about their candidates and to ask more searching questions.

Reveals hidden potential

Even though the ultimate evaluation of the project lies in the future, there have been some sources of immediate satisfaction for the Stanford staff. It has sometimes been possible to point out apparently strong candidates who have been overlooked by the local staff. Frequently, in the process of weighing information and raising questions about candidates, there have been occasions to suggest measures for the guidance of some candidates, for giving some a different assignment or wider experience, and for placing others in a position of more responsibility.

Finally, it should be said that this project owes much of its value to the fact that it is a part of a larger and carefully coordinated program. It is related to experimentation and studies being conducted in the training of school administrators, in the selection of candidates for advanced degrees in education, and in in-service training. Furthermore, the members of the Stanford staff have various other relationships with the cooperating school districts, serving as consultants in curriculum development, evaluation, administration, and as instructors of some of their teachers, supervisors and administrators.

Thus, the factors studied in relationship to the selection pattern flows out of and back into all other aspects of the current school program.



A panel of experts presides at conference sponsored by the School Planning Lab. Held each sumer, these conferences are attended by several hundred architects, superintendents, board members and graduate students.

research activities

- criteria of administrative effectiveness
- · analysis of research needs
- · techniques for administrator evaluation

N VIEW OF THE WIDE range of adminstrative problems covered by research activities at Stanford, this summary is limited to those systematic, formal studies conducted under the aegis or stimulation of the CPEA center. Most of these fall into three pre-defined categories.

One group of studies constitutes what we consider to be one of the necessary first steps in clarifying the criterion problem in administrator selection and evaluation. These studies, specifically, seek the range of identifiable and relatively homogeneous concepts of administrator effectiveness. They do not purport to be searches for the criterion of administrative success. Rather, it is held that the identification and analysis of present notions of what constitutes success are essential for effective functioning under any criterion and for clarification of factors involved in the generation of any criterion.

The administrative roles thus far considered in Stanford studies are the elementary principal in his supervisory role, elementary school supervisors, urban elementary school principals, principals, large-city superintendents and rural superintendents. The initial studies in this category direct considerable attention to questions regarding the validity and usability of the critical incident technique itself; the more recent studies have incorporated the subsequent modifications of procedures and developments in statistical treatment of the information derived from this technique.

Need research material they can use

Another category of research is the identification and analysis of research needs in educational administration. Because administrators perennially lament the lack of usable research bearing upon their present problems, some studies have been planned (two are completed) that seek to identify the difficulties involved. One of these studies, already published, sought the research priorities in educational administration as perceived by large city superintendents in all 48 states. Another, completed but not yet published, identified the perceived research priorities of professors of school administration and com-

pared the results with the priorities implied by the distribution of doctoral dissertations.

The third group of studies relates to the identification of techniques for administration selection, evaluation and success-prediction as discussed in the preceding article. These researches, all in process, cover a wide range. One inquires into the reliability of several standardized tests used in administrator selection. Although reported reliabilities for these tests meet the commonly accepted criteria, they have not been determined for the population of candidates for administrative positions. Since test reliability is partially a function of the nature of the examinees, the nine tests involved are being examined on the basis of their administration to 300 candidates for administrative positions in western, urban school systems. The results (total and sub scores) are being analyzed also for the purpose of determining their independence and intercorrelation.

Identification, evaluation techniques

Other efforts are directed toward the construction of techniques for identifying and evaluating written and oral expression, community activities and leadership, supervisors' assessments, assessment of fellow teachers, philosophical orientation, situational behavior, and professional growth.

Finally, some research is now being designed to examine the ability of all of these standardized tests, and the data-gathering procedures referred to, to make usable discriminations of degrees of administrative success at the level of principalship. Although plans are not yet complete, it is expected that central office and supervisory staffs in a large number of California school systems will provide evaluations of their principals against various sets of differing criteria. These principals will be subjected to the test battery being developed, and the kinds of information discussed earlier will be gathered for them. Partial, multiple, and zero-order correlations will be run between ratings on each of the success criteria, in turn, and the psychometric information.

These and other research activities recently completed or underway at Stanford are directly related to the basic concerns of the CPEA activities. Their major purpose is to illumine on-going administrative processes and programs.

by ARTHUR P. COLADARCI, associate professor of education and psychology, Stanford University-

McClure to Retire as AASA Executive Sec'v

WASHINGTON-Worth McClure will retire as executive secretary of AASA on July 1, 1956, after a decade of service in that position, it was announced recently.

During his tenure, the professional organization for school administrators has grown from around 6,000 members in 1946 to the present figure of 10,000, an accomplishment due in large part to the efforts of Dr. McClure and his staff.

Dr. McClure has a record of three and one-half decades of activity in professional work for national educational associations and departments, beginning with his service as president of NEA's Department of Elementary School Principals in 1922 and 1923.

President in '43-'44

He was president of AASA in 1943-44, and has served as executive secretary since July, 1946.

He has also been associated with the Educational Policies Commission. American Educational Research Association, Kappa Delta Pi and Phi Delta Kappa.

After his retirement, Dr. McClure plans to continue active in helping with problems confronting school administrators.

His successor as executive secre-

McClure: retires



tary will be selected by the AASA Executive Committee.

Born in Indianola, Iowa, in 1886, Dr. McClure received his A.B. Degree from Simpson College, and his

Rural School Leadership and Services Is Theme of Conference October 9-12

SAN DIEGO, Calif.—The role of the county or intermediate office in providing "Leadership and Services for Today's Schools" will be explored by administrators meeting here October 9 through 12 for the tenth national conference of County and Rural Area Superintendents.

The questions and concerns of the nation's county school superintendents will be voiced by President Ernest W. Barker, superintendent, Pottawattamie

County, Council Bluffs, Iowa, in his keynote address on Monday morning, October 10, according to Lois M. Clark, administrative adviser, County and Rural Area Superintendents and assistant director of rural service, NEA.

Miss Clark reports that the Conference will draw extensively from Cali-



Dawson



Barker

fornia's experiences with a county services program.

C. C. Trillingham of Los Angeles County and Ernest Melbo of the University of Southern California will report findings of a special California committee concerning the respective roles of the state, the interme-



Trillingham



Melbo

diate unit and the local district in education.

Leadership teams representing many California counties will show how the county superintendent's office and central staff work with local schools in providing leadership and services in curriculum and course of study development, inservice teacher education, instructional improvement in small schools, school board advisory services, financial services to local districts, services for exceptional children, and various other services, according to Miss Clark.

Clinic groups on how to begin a

A.M. from the University of Wash-

He has ED.D. degrees from both Simpson College and Columbia University.

Dr. McClure began his educational career as teacher and public school principal in the state of Washington from 1909 to 1915.

He then began a 29-year career in Seattle, Wash., progressing from principal and assistant to the superintendent, to assistant superintendent and finally superintendent of schools in 1930

He was chief school official in Seattle until 1944, when he became superintendent in University City, Mo., a position he held until 1946.

Dr. McClure has taught education at New York State Teachers College at Buffalo, University of Washington, University of Chicago, Stanford University, Teachers College at Columbia University and Washington University.

county services program; effective organization and structure and needed legislation for the intermediate unit; and moving from a program of direct service to one of consultation and coordination, will also be directed by California leaders.

Other leaders from states throughout the nation will assist in the sec-







Whinnery

tional meetings and clinic groups, which are scheduled for Monday afternoon and Tuesday morning, October 10 and 11.

Other features of the conference include an informal reception and the vesper service on Sunday, October 9; a dinner meeting on Monday evening, October 10, addressed by Arthur F. Corey, executive secretary, Califoria Teachers Association; educational visits and a recreational evening on Tuesday; and the traditional All-States Luncheon on Wednesday, October 12.

Preceding the All-States Luncheon, the final general session will be addressed by John C. Whinnery, superintendent of schools, Montebello City, Calif., speaking on "Charting Education in an Atomic Age."

Howard A. Dawson, executive secretary of the organization, will summarize the conference and discuss implications for the future.

Summary by Dawson

General plans for the conference were developed under the leadership of Ernest Barker, division president, and Cecil Hardesty, first vice-president, with the active assistance of the California Association of County School Superintendents.

The Conference is part of the broad program of services of the NEA Department of Rural Education of which Clifton Huff of Emporia, Kansas, is president.

The 1956 Conference will be held in Atlanta, Georgia.

Schoolhouse Quartet



Lewis A. Wilson, who retired last month as New York State Commissioner of Education, joined three of his staff members in happy harmonizing during a picnic held recently in his honor. Over 700 Education Department employees gave Dr. Wilson a 1955 Oldsmobile. Left to right: Frederick J. Moffitt, associate commissioner for elementary and secondary education; Dr. Wilson; Hazel Abrams and Alvin Turner, department staff members.

Topics Affecting School Business Heads On Agenda of ASBO Chicago Convention

CHICAGO—Final plans have been completed for the 41st annual convention of the Association of School Business Officials of the United States and Canada, October 16-20, at the Sherman Hotel, reports Charles W. Foster, publicity chairman.

Chief speakers at the meeting will be A. D. Holt, vice president, University of Tennessee, and former NEA president, and Walter Johnson, chairman,

Department of History, University of Chicago.

Other speakers scheduled for the convention are Paul Misner, president-elect, AASA; Benjamin Willis, general superintendent of schools, Chicago and Richard J. Daley, mayor of Chicago.

Mayor Daley, Dr. Willis and Dr. Johnson will address the convention Monday morning, October 17, while Dr. Holt will speak at the banquet Wednesday evening, October 19. Dr. Misner's talk is scheduled for Wednesday morning.

Monday afternoon will be devoted to sectional meetings in the fields of accounting and finance and schoolhouse planning and construction.

Tuesday plans include reports, research and tours. That evening, discussion groups will meet on subjects



Holt



Johnson

of interest to educational business managers.

Dr. Misner will talk Wednesday morning. Sectional meetings will occupy the afternoon.

The final session will be held Thursday morning. Schuyler C. Joyner, deputy business manager, Los Angeles City Schools, will receive the past president's award from Sam S. Dickey, assistant superintendent of schools, Lakewood, Ohio.

Research in School Administration Spurred At NCPEA Work Conference

STORRS, Conn.—The ninth annual session of the National Conference of Professors of Educational Administration was held as scheduled in late August at the University of Connecticut, despite catastrophic floods which made travel very difficult.

Under the guidance of Harold E. Moore, University of Denver, chairman of the planning committee, the educators met to discuss latest research findings and up-to-the-minute views on mod-

ern school leadership.

Approximately 100 professors representing more than 30 states and 60 universities, together with 35 consultants and representatives from allied associations took part.

Small work groups

Concentrating in small workgroups, the educators studied intensively significant research findings and project reports on such topics as community analysis and the role of the school administrator in community improvement, organizational structure in educational administration, communication and decision making, personnel, school law, improving preparation and in-service programs, internships and field experience.

Additional research on these and other topics was outlined for continued studies throughout the year.

The new research reports will form the basis for the tenth anniversary of NCPEA, scheduled at the University of Arkansas in August, 1956, with Walter A. Anderson, New York University, as chairman of the planning committee.

Newly elected to planning committee posts are Howard Bretsch, University of California at Berkeley; Warren Gauerke, Emory University, and Jack Childress of Northwestern University.

The challenge to administrators on the international, national and local levels drew the spotlight at general sessions at the Storrs meeting.

The first phase was outlined by Oliver J. Caldwell, assistant commissioner for international education, U. S. Office of Education.

Narrow vast gaps

He described the vital need to narrow the vast technological and social gaps between countries.

Dr. Finis E. Engleman, Connecticut State Commissioner of Education and vice chairman of the President's committee for the White House Conference on Education, outlined plans for the 2,000 delegates who will meet in Washington November 28-December 1 to discuss the six major problems on the conference agenda.

The University of Buffalo's chancellor, C. C. Furnas, called for greater emphasis on "substance" rather than "form" in the training of school executives.

Good administrators, he emphasized, might take a tip from successful scientist-administrators who are "specialists in something."

Panel on CPEA

A special feature of the seven-day work conference was a panel discussion on "Major Outcomes of the CPEA and their Dissemination."

Panel chairman F. E. Henzlik, dean, School of Education, University of Nebraska, presented speakers John K. Norton, Teachers College, Columbia University; T. James Ahern, superintendent of schools, Mamaroneck, N. Y. and Hollis Moore, Jr., Executive Secretary, of the Committee for the Advancement of School Administration, a newly established arm of AASA.

The panelists, together with a staff of consultants who were directors of various CPEA centers, reported expanding cooperation between professors and school administrators in solving field problems.

Growth in teamwork

They also emphasized the gratifying increase in interdisciplinary teamwork in the preparation of school leaders.

A conference highlight was the announcement of a Kellogg Foundation grant of \$10,000 to NCPEA. The grant will enable NCPEA to carry out plans, developed over the past two years, to produce a book, Administrative Behavior for Education.

Co-editors R. S. Campbell, Ohio State University and R. T. Gregg, University of Wisconsin, expect the book to be published early in 1957.

The closing session was highlighted by a group evaluation of NCPEA, led by Walter D. Cocking, editor, The School Executive.

Never too busy for education



Educators hope American Education Week, November 6-12, will inspire more citizens to follow this mother into active service in the cause of better schools. Theme of the Week this year is "Schools—Your Investment in America."

Hunt Gets HEW Post



Washington—Herold C. Hunt has been appointed Undersecretary of Health, Education, and Welfare, Department Secretary Marion B. Folsom announced recently.

Dr. Hunt, currently Eliot Professor of Education at Harvard, has served as superintendent of schools in Kansas City, Mo. and Chicago. He is a former AASA president.

Engleman Heads Details Of Planning for WHC

Washington—As the White House Conference on Education grows closer, a special subcommittee of the President's Committee for the meeting is working on last-minute physical details made necessary by a meeting of 2,000 persons from 53 states and territories.

Finis Engleman, vice-chairman of the President's committee and Connecticut Commissioner of Education, is chairman of the subcommittee.

Travel costs paid

The 84th Congress recently appropriated funds to provide transportation costs for the 1,400 delegates coming to Washington, November 28-December 1, for the conference.

They will be allocated to states and territories on the basis of the number of participants from each.

Each state and territory will be represented by at least ten participants with additional delegates selected on the basis of population.

Francis Parkman, headmaster, St. Marks School, Brookline, Mass., and executive secretary, National Council of Independent Schools, has been appointed consultant in non-public education, according to Clint Pace, con-

ference director.

Dr. Parkman will work with each of the subcommittees studying the six topics on the WHC agenda.

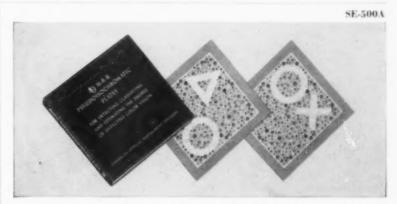
Defense Group Studies Bills Case in Kansas City

Washington—The Defense Commission of the National Education Association is investigating "conditions leading to the failure of the Board of Education to renew the contract of Mark W. Bills, superintendent of Kansas City (Mo.) schools,"

A committee of five members conducted an inquiry in Kansas City recently. A report will follow.

Requests for the investigation were made by the Association of Community Councils of Kansas City and Kansas City Cooperative Council of Teachers.

The investigation was approved by the executive board of the Missouri State Teachers Association.



Completely New AO H-R-R COLOR BLINDNESS TEST

Most Accurate and Comprehensive Low-Cost Test Ever Developed

The New AO Hardy-Rand-Rittler Pseudoisochromatic Color Test is the most accurate and complete inexpensive test of its type ever developed. The work of eminent optical authorities, it is the result of more than ten years of scientific investigation, production and validation.

The test not only detects people who have Red-Green and/or Blue-Yellow color blindness but also types the deficiency and estimates the degree of defective color vision present.

Students who are color blind cannot and should not be expected to make determinations dependent on normal color vision. Ideally, they are color

tested and when found deficient the school guidance program directs them toward vocations where defective color vision will not be a handicap. To accomplish this easily, the new test has been designed for the utmost simplicity of administration. For the vast majority of students it is completed in seconds. Simple, detailed instructions and understandable scoring sheets are part of the test. The recognition symbols used . . . the circle, triangle and cross are universally understood and the ingenious pattern of the plates allows no clues for memorization.

AO branches are located in nearly 300 major cities, or write



INSTRUMENT DIVISION BUFFALO 15, N. Y. Dept. V-71. Please send complete information on the H-R-R Color Test.

Name	
School Title	
Address	
City	State



RCA Sound gives immediacy and authority to the spoken word ... gets things done promptly.



Teachers welcome the assistance of planned programs channeled over RCA Sound Systems.



Learning to be at ease before an audience is of great advantage in later years.

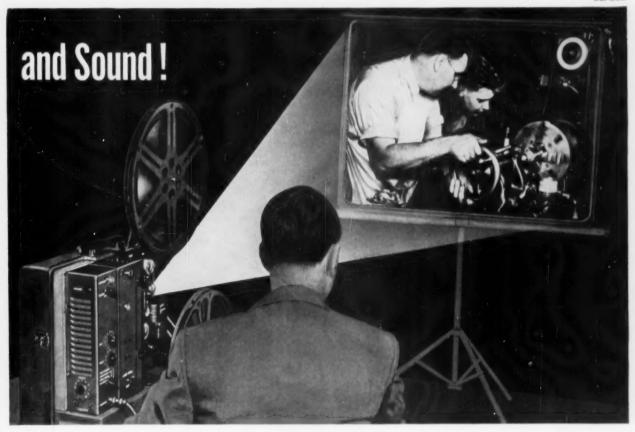
Sound makes a world of difference!

IN ADMINISTRATION ... gives you instant voice contact with supervisors, teachers, whole classrooms or the entire school at the flick of a switch. Saves time in calling and attending special assemblies. Eliminates so many written notes and messages. In routine fire drills or emergencies, instructions are heard by everyone. Two-way voice communication easily added, and system expanded at any time.

IN CURRICULUM . . . RCA Sound brings a whole new world of drama, music, languages, history and current events to augment your list of subjects and increase the curriculum without adding to your staff. A wide variety of records and transcriptions, as well as selected radio broadcasts, may be used to enrich and vitalize instructions-from literature to physical education.

IN STUDENT ACTIVITIES . . . The "professional touch" of microphone and speakers puts new student interest in plays, debates, round-table forums and civic problems. With RCA Sound they can either speak or listen!

RADIO CORPORATION



"First Assistant" to busy teachers!

RCA 400 PROJECTOR

...makes teaching easy...learning fun!

RCA Sound Systems for schools have proved their value in hundreds of installations—each one custom-tailored to the school's needs, layout and budget. Get the facts before you decide...mail coupon below for RCA's interesting new booklet on School Sound Systems.

And first in favor the country over for its compact, simple design and reliable performance! For quick, easy threading, for silent mechanism, for brilliant steady pictures and smooth crisp sound you just can't top the RCA 400 in either the Senior or Junior model. Ask your local RCA Audio-Visual Dealer for a demonstration, and you'll appreciate why to schers and pupils alike develop a new confidence in their ability to put on a real show when operating an RCA Projector. If you'd like further information, just clip and mail the coupon below.



Engineering Products Division, Camden, N.J. In Canada: RCA VICTOR Company Limited, Montreal

of AMERICA

'ding 15-1 Camden, New Jersey	
Please send me further data on	
RCA School Sound Systems	
RCA 400 Senior and Junior	Sound Film Projectors
,	
	Title
Name	
Name School Address	

TOMBSTONE ...



• OR CORNERSTONE?

Five years from now, certainly, you will expect your new school to be a reflection of *today*'s progressive planning.

But will it . . . electrically?

Will you plan your electrical facilities to handle the loads a 23% student increase will create by 1960? Or provide the margin of safety for a 36% enrollment rise in high schools alone?

There are many schools, built in recent years, that haven't planned on a long-range basis . . . did lay electrical tombstones.

To avoid them, you will want to plan-in enough circuits . . . include modern circuit protection . . . provide now for easy, economical expansion.

For remember: Today's preparation for tomorrow's needs is reflected in your vitally important electrical facilities. Only when they incorporate inherent safety . . . only when they anticipate future capacity will they be your monuments of progressive planning.

Your architect can help you. Ask him for counsel. Then lay an electrical cornerstone... not a tombstone.



Ask your architect about the new Westinghouse schoolbook, covering the "why?" and "how" of modern electrical practices. Or write for your copy of B-6521. Westinghouse Electric Corporation, 3 Gateway Center, P. O. Box 868, Pittsburgh 30, Pennsylvania. J-94041

Westinghouse

SPOTLIGHT

New Law Provides for Ready Military Reserve

WASHINGTON—A long-disputed plan for a military reserve has been adopted by Congress.

The measure increases the present reserve of 800,000 men to 2,900,000.

A principal purpose of the plan is to compensate for cuts already made for economical reasons in the Army, Navy, Marine Corp, Air Force and Coast Guard.

Its supporters offer it as a substitute for what they claim as its alternative, a "professional military."

The "ready reserve" will be composed largely of young men who have not seen service. It would require the enlistment of youths 17-181/2 years old.

Youths of this age may choose three to six months of active service

with regular military units, followed by seven and one-half to seven and three-quarters years obligation to periodic training in the ready reserve.

The youths could sign up at any time and be deferred, until they had graduated from high school or attained the age of 20.

This option was included in the legislation to enable those who wished to do so to finish their high school education before entering military service.

Servicemen with previous experience will be accepted up to a specified number into the ready reserve for the purpose of training the rookies.

Enlistment of men with prior service would be entirely voluntary, but it would reduce their obligation to the total period of reserve service and provide opportunities for earning promotions and retirement privileges as well.

International Study of Teaching Status Shows Improvement, World Meeting Told

ISTANBUL, Turkey—Teachers from 40 nations throughout the world met here recently to discuss how to raise the status of the teaching profession.

Over three million teachers were represented by these delegates at the conference of the World Confederation of Organizations of the Teaching Profession.

A world-wide study made by the confederation showed improvement in the status of teachers over five or ten years ago.

Most countries reported better economic conditions, with salaries raised considerably.

Compared with other professions, however, the teachers pointed out that their increases were insufficient.

Emphasized was the need for improved economic situations for teachers to attract superior men and women.

Aside from salaries, the teacher's condition has improved in the social and political fields, the report went on.

More responsibility for the standards of their profession, and a feeling of power and prestige has resulted.

As in this case, similarities were

indicated everywhere among the nations represented in increased school populations, in the shortage of teachers, the lack of adequate school buildings, the need for improvement of teacher training and other aspects of the current scene.

"Optimism was expressed by most delegates," reports Benjamin Fine, education editor, The New York Times.

"Public awareness of the importance of education was cited as a most important step toward elevating the entire profession." Mr. Fine writes.

The delegates also felt that meetings like this, bringing together representatives of major world school groups, were also cause for hope.

The National Education Association was represented by 35 delegates

Automatically!

Sani-Dri Electric Dryers

* eliminate needless towel costs!

* save

maintenance overhead!

* clean-up littered washrooms!

(More sanitary! No fire hazard!)



No. 7-A Model. See catalog for recessed

Even With Just 1 Washroom-You Can Save, Too!

Savings are automatic with Sani-Dril You eliminate 85% of washroom maintenance overhead PLUS 100% savings in towel costs. In addition, you get 'round-the-clock automatic drying service with greatly increased sanitation. Investigate this modern trend to law cost automatic drying now!



Write Today For Latest Facts!

Get the savings facts about Sani-Dri, the original and only complete line of dryers sold throughout the world. All models carry Underwriters' Seal and full 2-year guarantee. Write today!

Distributors in All Principal Cities THE CHICAGO HARDWARE FOUNDRY CO.

"Dependable Since 1897" 23105 Commonwsa.th Ave., North Chicago, III.

SPOTLIGHT

at the meeting.

J. Lester Buford, superintendent of schools, Mt. Vernon, Ill., NEA president, headed the delegation which included Past-President Waurine Walker, and Executive Secretary William G. Carr.

El Paso Board Votes End To School Segregation

A recent issue of the Edpress News Letter listed these reactions and developments as "typical" regarding the Supreme Court's decision requiring federal district courts to require "a prompt and reasonable start" toward ending racial segregation in the public schools.

• The National Association for the Advancement of Colored People. at its annual convention in Atlantic City, announced that it would "insist that desegregation be completed by not later than the school term beginning September, 1956."

· By a vote of 6 to 1, the school board in El Paso, Texas, voted abolition of segregation in the city's public schools, becoming the first major Texas city to adopt such a policy.

• The school board of Chattanooga. Tenn., announced plans to drop segregated schools, but integration will not start at least until next year.

• The State of Maryland dropped its policy of segregated teachers colleges, effective this fall.

. In Raleigh, N. C., a federal judge ruled that designating new school construction as either "white" or "Negro" was illegal.

• The Georgia State Board of Education voted to revoke "forever" the license of any teacher who "supports, encourages, condones, offers to teach or teaches" Negro and white pupils in the same classroom.

The ruling, however, was later rescinded by the same board.

• The superintendent of schools of the Catholic Diocese of Richmond. Va., reported that the reaction of

SE-336





· You need a fence if the children lack protection against common hazards. And you certainly want time-tested quality in the safeguard you provide. Whether you choose heavily galvanized Copper-Bearing Steel, corrosion-resisting Aluminum, or long-lasting Stainless Steel, PAGE Fence is quality controlled from raw metal to rugged fence erected on metal posts deep-set in concrete. Available are 8 basic styles, varied by heights, types and sizes of gates, and top rails. Finally, your PAGE Fence will be expertly erected by a reliable, technically trained firm permanently located in your vicinity. For important fence data and name of nearest PAGE firm-

Write to PAGE FENCE ASSOCIATION in Monessen, Pa., Atlanta, Bridgeport, Chicago, Denver, Detroit, Houston, Los Angeles, New York, Philadelphia or San Francisco.

PRODUCT OF PAGE STEEL & WIRE DIVISION OF AMERICAN CHAIN & CABLE COMPANY, INC.

*4

Whatever your school position butto makes your job easier!

ADMINISTRATIVE



Administrative duties become easier with the help of low cost, work saving DITTO duplicators. Notices, reports DITTO duplicators. Notices, reports and instructions can be produced in minutes, instead of hours, at just pennies in cost. DITTO colors add life to programs, charts and graphs. DITTO Workbooks for every grade develop happier, more efficient teachers.

Arithmetic + Science Language



Whatever your copy needs, DITTO turns hours of work into minutes of pleasure So easy to operate your pupils can help Countless schools are using DITTO save hours - make teaching easier. You can save planning and homework with pre-printed DITTO Workbooks, too. No. better teaching aid yet devised.

EXTRA-CURRICULAR



extra student activities. DITTO dupliextra student activities. DITTO dupli-cators lighten the copywork load. Give you more time for creative aid and guidance. Add life and color to announcements, school papers, posters. So simple to operate, students like to help. Choose one of DITTO'S three school duplicators.

Only DITTO has 3 duplicators designed for school use

LOW PRICED . EASY TO OPERATE PERFECT RESULTS EVERY TIME

All three make 120 copies a minute of anything you type, write, draw er trace on any weight paper or card stock, in 1 to 5 colors, at once, at just pennies in cost. No stancils—ne mats—no inking—no make ready.



D-10 America's most popular low priced school duplicator. Easiest to operate of them all



D-15 Deluxe duplicator with extra features such as automatic counter and cover receiving trav.



D-11 Low priced automatic elecwith magic copy control makes copywork doubly easy.

HERE'S ALL YOU DO TO MAKE 300 OR MORE BRIGHT COPIES



Simply write, type, trace or draw on the DITTO Master. (No special tools needed.)



Slip DITTO Master onto the drum of your DITTO Duplicator.



Turn handle or press switch, and out come the needed copies

NEW DITTO WORKBOOKS ... For Reproduction on Liquid Machines

Each book contains pre-printed daily lesson material, ready for making 3 to 300 or more copies as needed. Written by teachers— edited by nationally recognized educators. Each \$3.25 Write for titles:

MAIL COUPON NOW-tor brighter classes, easier ter DITTO, Inc., 2340 W. Harrison St., Chicago 12, III.

Gentlemen: Without cost or obligation, please send me

Literature on DITTO Duplicators Sample DITTO Workbook lessons and catalogue and please arrange for:
 Office demonstration or free 10 day trial

Name

County_



No repair bill—This is TUF-FLEX glass

To save maintenance money year after year, make sure all windows in vulnerable spots are glazed with Tuf-flex* Tempered Plate Glass.

Tuf-flex is three-to-five times stronger than regular plate glass. In fact, a ½ lb. steel ball dropped ten feet on a piece of ¼"-thick Tuf-flex, bounces right off. Quarter-inch Tuf-flex is made of L·O·F twin-ground Parallel-O-Plate Glass, the clearest, finest plate glass made in America.

For the whole story contact your L·O·F Distributor or Dealer. *@

TUF-FLEX tempered plate glass



LIBBEY. OWENS. FORD a Great Name in Glass

608 MADISON AVENUE . TOLEDO 3, OHIO.

SPOTLIGHT

parents to its integrated school program during the past year was "very good."

- The State of Virginia announced that schools would open on a segregated basis this fall and continue that way at least through next year.
- Alabama enacted a law giving city and county school boards unprecedented authority in determining where individual pupils must attend schools on the elementary and secondary school levels.
- In the West Texas town of Matador, Negroes requested that integration not be started until next year.

The reason given was that Negroes want to open their schools early so that time off can be taken from classes later for the cotton-picking season.

Fewer PHD's Plan Teaching After Receiving Degree

COLUMBUS, Ohio—A study by The Ohio State University shows that since 1952, only 44 percent of those receiving PHD degrees in any one year enter teaching.

Traditionally, about 60 per cent of the PHD's planned to teach at colleges and universities.

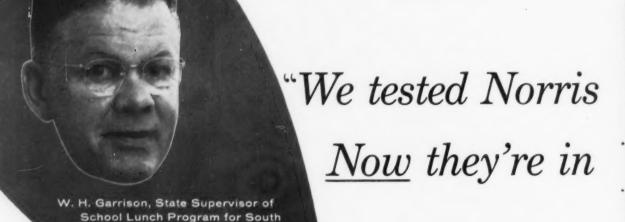
Role of Public School Adult Educator Theme of Meeting

St. Louis—With "The Role of the Public School Adult Educator" as theme, members of the National Association of Public School Adult Educators will meet here November 10-11 for their third annual conference.

The Conference precedes the annual meetings of the Adult Education Association of the United States of America, and its closing session will be jointly held with AEA's opening Assembly, according to R. J. Pulling, president, and chief, Bureau of Adult Education, New York state Department of Education.

Mr. Pulling said that "the recent expansion of the membership of the public school group reflects clearly







Carolina. His study in the Olympia School at Columbia, South

Norris Milk Dispensers

Milk Dispensers for just one week. 300 South Carolina schools!"

How Norris Milk Dispensers solved the milk service problem in South Carolina schools:

Only one week of operation at Olympia School, Columbia, South Carolina, was needed to prove the superiority of Norris service in every category. This test operation was conducted in a crowded lunch room, with elementary as well as older grades, and a very short serving time was allowed. Mrs. M. O. J. Kreps, Olympia lunchroom manager, says, "The Norris Dispenser is more sanitary, the children enjoy it and drink more milk."

The complete results were faster milk service, colder milk, lower costs and increased sanitation. An endorsement for the use of Norris Milk Dispensers throughout the entire South Carolina school system followed. Now over 300 South Carolina schools use Norris Milk Dispensers and the number is constantly increasing.

You, too, can increase milk consumption in your school with a Norris Dispenser. You can take a more active part in the intensified Federal School Lunch Program. Eliminate messy "empties" and hard-to-handle halfpints. Save enough through buying milk in bulk to pay for your Norris Dispenser within a year!



Norris Dispensers, Inc. 2720 Lyndale Ave. So., Minneapolis 8, Minnesota

Please send me your brochure, "How to Solve Milk Service Problems in Schools and Colleges."

Name_

School

Title_

Address

City

State

HUSSEY "ROLL-OUT" GYM SEATS



Gage Park High School Chicago, III.

Extra seating or ex-tra floor space as reeded. Easy to open easy to close. Note exclusive, Hussey "closed deck".

VALUE VS PRICE

Seating is a long range purchase-you've got to live with it. So, when you buy seating, buy Value not Price. The lowest bid can be the most expensive. Hussey Seating is engineered by seating specialists. It is designed and built to meet your seating requirements. Whether it's the new, exclusive "closed deck" Roll-Out gym seats, Portable Bleachers or Permanent Grandstands, HUSSEY Seating gives you the most for your money.

Model 6 Partable Steel Bleacher (patented) available for immediate delivery in 6-10-15 tier 12 ft. sections. The same stand can be used both indoors and out. Easy and quick to put up and take down. More than a million seats in use.

Write Today For FREE Catalog And Prices



SINCE 1835

HUSSEY MFG. CO., INC. 550 R.R. AVE., NORTH BERWICK, MAINE

Also mfrs. of Piers, Floats, Diving Boards, etc.

SE-342 These Finest of all Master-Keyed locker locks **DUDLEY P-570** Master-Keyed Padlock Quality features include rugged case of cast aluminum, extra heavy steel shackle, satin finished dial, self-locking mechanism, extraordinarily pick-resistant. S-540 ... the built-in locker lock with 15-second combination change! Every Dudley Lock is EXTRA SECURITY guaranteed for two with the DUDLEY years. Write for Catalog Folder. Master Key Unique inside channel pattern can't be duplicated on commercial key-making machines. Can be set up for S-540 and P-570 together,

DUDLEY Lock Corporation

Dept. 1019, Crystal Lake, Illinois

SPOTLIGHT_

the steadily growing emphasis on adult education in the public schools of this country.

"Nearly 90,000 teachers are now involved in the public school adult education programs which in recent years have grown from 'night schools' to the point where widely diversified activities are available to adults."

Among the principal speakers will be Phillip J. Hickey, superintendent of instruction, St. Louis Public Schools: H. Grant Vest, commissioner of education, Colorado, and Mr. Pulling.

Twenty-five other leaders will conduct sessions on a variety of topics relating to the theme.

Preceding the Conference there there will be an all-day meeting on November 8 which will be devoted to the problems of state directors of education. This program has been developed and will be chaired by Dr. Everett Preston of New Jersey.

AEA Plans Conference On Community Development

CHICAGO-The Adult Education Association of the U.S.A. will sponsor a national conference on community development November 11 through 13 at the Jefferson Hotel in St. Louis, Paul L. Essert, president of the association, announced recently.

The conference will bring together a forum of social scientists and community planners, to assess the impact of adult education on community growth.

1,500 expected

About 1,500 persons are expected

The spectacular increase in adult education activities in the U.S. today is already making a mark on the pattern of community living," Dr. Essert stated.

"When men come together to learn and acquire new skills in adult life they are inclined to tackle practical problems such as those posed by their environment.

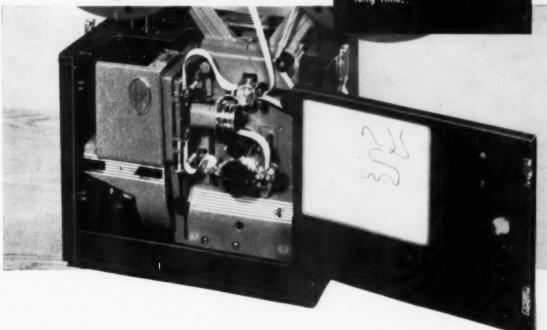
'A growing adult education movement is the surest way to community

How the

NEW VICTOR 16mm SOUND PROJECTOR PAYS ITS WAY through school . . .

SAVES BUDGETS

Victor Safety Film Trips protect film from damage so you can buy new film instead of replacements And, the Victor's engineered for rugged use, built to last a long, long time.



You get your full dollar's worth with the new Victor 16mm Sound Projector. It's so easy to operate, teachers use it every chance — and cut your cost per showing way down. 3-spot threading is quick — operation is simplest ever with fingertip control panel. (1) Start motor, (2) turn on lamp, (3) adjust sound volume.

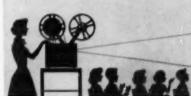
The Victor's loaded with features that insure longer film and projector life. Exclusive Safety Film Trips detect previously damaged film . . . stop projector instantly so there's no further damage . . . also prevent possible damage from misthreading. Victor's Lubrimatic Oil System

for controlled automatic lubrication gives you trouble-free operation that reduces servicing . . . Air Conditioned Lamp House is 20% cooler for longer lamp life . . . Pawls are sapphire-tipped for indefinite durability . . . Air Conditioned Film Gate is 17% cooler, makes film last longer.

SEND FOR FREE FOLDER TODAY

TEACHER CONFIDENCE

— inspired because teachers can operate the Victor easy as 1-2-3 . . . can't thread it wrong . . . can't damage film!





Clnimatograph Corporation
Dept. E-105, Davenport, Iowa, U. S. A.
New York—Chicago

Quality Motion Picture Equipment Since 1910





improvement. This promises to be one of the most significant areas of social advancement of the next decades."

Adult education, Dr. Essert pointed out, is not confined only to formal programs of systematic learning in schools and colleges.

The varied part-time educational programs offered by civic, fraternal,

religious welfare and service organizations are a significant part of the adult education movement, he feels.

50 million involved

Nearly 50,000,000 Americans, according to Dr. Essert, are currently involved in adult education activities.

Outstanding programs of community development that have been brought about through cooperative citizen activities will be described at the conference. The program will focus on four chief topics: criteria of a good community, obstacles affecting the development of the community, the role of adult education and allied interests in contributing to the growth of the community, and the implication of world affairs on the community.

Preceding the conference, workshops will be held in all 48 states to review the status of programs to improve communities in those areas. The results of this survey will be made available at the conference through exhibits and seminars.

The conference will feature a continuing panel of experts, including theorists and practitioners in community organization.

List speakers

Scheduled speakers include: C. Wright Mills, professor of sociology, Columbia University; John Ivey, director, Southern Regional Educational Board; Everett C. Preston, director, Adult Education, New Jersey State Department of Education; and Leo Perlis, director, National CIO Community Services Committee.

Other speakers include Robert Montgomery, University of Texas; Richard Poston, University of Southern Illinois; William F. Russell, Deputy Director for Technical Services, Foreign Operations Administration; Howard Y. McClusky, University of Michigan; and Cyril O. Houle, University of Chicago.

U. of Illinois Becomes 14th Ed TV Station

URBANA, Ill.—The nation's fourteenth educational television station began broadcasting recently from the campus of the University of Illinois in this community.

A total of 26 educational TV channels are expected to be in use by the end of the year, reports a survey by the National Citizens Committee for Educational Television.

Hull, Ludington Named to Office of Education Posts

WASHINGTON—J. Dan Hull has been appointed director of the Instruction, Organization, and Services Branch, and John R. Ludington, chief of the



• IT MAKES GOOD SENSE to use all of the glass area built into your windows. Why allow bulky cloth at the ends, top or bottom to block window area when not in use?

Draper New Way Overlapping Shades are entirely new and different . . . are proving much more efficient and economical. The continuous bracket-shield is mounted on the division bar between the glass blocks and clear glass. Both upper and lower roller shades have independent action. Each shade can be adjusted to the desired position . . . or rolled up completely off the glass area and kept clean for instant, easy operation.

Draper New Way Shade Units are available in natural, cream-white, or tan Dratex cloth for light transmission. For effective darkening, these shades are equipped with light color opaque or black Dratex cloth.

DRAPER

Write today for your copy of the New Way Shade Unit folder.

SHADE CO. P.O. Box 483 - Spiceland, Ind.

How low-cost quiet builds high-level grades



The Johns-Manville Fibretone Acoustical Ceilings installed throughout this elementary school keep distracting noise to a minimum, encourage classroom concentration, and make work easier for both students and faculty.

Johns-Manville FIBRETONE ACOUSTICAL UNITS

reduce disturbing noise at low cost

BECAUSE distracting noise is so harmful to efficiency in any activity, practically all new building specifications include acoustical ceilings for sound absorption. However, just because your present building was constructed before sound control became an established science, there is no reason for you to be handicapped by noise. You can have a Johns-Manville Fibretone* Acoustical Ceiling quickly installed over your present ceiling.

Johns-Manville Fibretone offers an acoustical ceiling which is highly efficient yet modest in cost. It consists of 12" square panels of sound-absorbing materials in which hundreds of small holes have been drilled. These holes act as "noise-traps" where sound energy is dissipated. Fibretone is predecorated, can be painted and repainted, and is available with a flame-resistant finish.

For a complete survey by a J-M acoustical expert, or for a free book entitled "Sound Control," write Johns-Manville, Box 158, Dept. SE, New York 16, New York. In Canada write 565 Lakeshore Road East, Port Credit, Ont.

Uniform Drilled and Variety Fibretone units are easily installed over new or existing construction. Hundreds of small holes drilled into the sound-absorbent panels increase acoustical efficiency.

See "MEET THE PRESS" on NBC-TV, sponsored on alternate Sundays by Johns-Manville

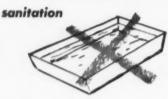


Johns-Manville



DON'T SPREAD IT

with old fashioned methods of foot



SANI-MIST eliminates: Foot baths; Foot pads; Messy floors; Contamination; Dilution; Re-use of solution. The SANI-MISTER dispenses an individual full strength treatment that kills the principal fungi causing Athlete's Foot in less than 30 seconds.

Preferred by schools, clubs and industries from coast to coast. Send coupon now for full details.

	end compl an SANI-l			
	s Foot pre			,,,
Name		. Title .		
Compan	у		* * * * *	* * *
Address				
City	Zo	neS	tate.	

SPOTLIGHT

Secondary Schools Section on the staff of the Office of Education, S. M. Brownell, Commissioner of Education, announced recently.

Both Dr. Hull and Dr. Ludington have worked in the Office of Education for several years.

Dr. Hull has been chief, Instructional Problems; assistant director, Elementary and Secondary Schools Division; and chief, Secondary Schools Section.

Dr. Ludington has served as a specialist in Secondary Education and as chief, Civil Defense Education.

High school posts

Dr. Hull, a native of Mountain Grove, Mo., has held high school principal positions in Mountain Grove; Sullivan, Ind.; Springfield, Mo.; and Indianapolis, Ind.

He is author and editor of books and publications in secondary education and was a contributor to the 52nd Yearbook of the National Society for the Study of Education on adaptation of the secondary-school program to the needs of youth.

Dr. Ludington has had a total of seventeen years' teaching experience in the public schools of Muncie, Ind., and at Ball State Teachers College, Ohio State University, and North Carolina.

He has served as a consultant or committee member on school surveys and research publications in secondary education. He recently represented the United States in an international conference in the South Pacific.

He is a native of Muncie, Ind.

JCET Protests Claim of Des Moines Business Group

Washington—The Joint Committee on Educational Television is appearing before the Federal Communications Commission to protest the appeal of a Des Moines commercial organization for a permit on Channel #11, a VHF channel assignment, set aside for education.

The supporters of the Committee.

CHAIRS and STOOLS for

Classroom

Especially advantageous where instruments and other types of equipment are used. Biology classroom illustrated, Permits proper sent beight for both standard and higher requirements.



Laboratory

AJUSTRITE was first designed and made specifically for laboratory use. Quick, easy adjustment permits just the right height for many, varied and changing requirements.

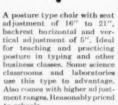


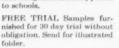
Vocational

In all departments, drafting, manual training, business education, craft shops, home economics and others—AJUSTRITE stools and chairs offer many advantages to the effectiveness of instruction.



The most popular AJUST-RITE stool. Seat adjusts 18" to 27"—bas 13" diameter steel seat; hardwood seat, backrest, floor glides optional. All metal construction for lifetime durability. This one stool meets most requirements in majority of laboratories and shops which would otherwise need several sizes of ordinary stools.



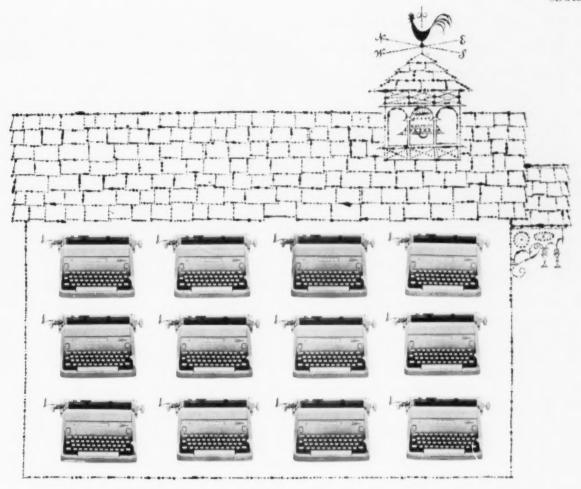




Model TSC 1520

AUTOMATIC ADJUSTMENT
to Any Height Desired

AJUSTO EQUIPMENT CO.



Why are there more Royals in schools than any other typewriter?

From a classroom point of view, Royals are easier to teach on and easier for the student to learn on. They are the preferred typewriter in America's classrooms.

From an administrative point of view, Royals stand up under rugged classroom use. They take less time out for repairs; so maintenance costs are reduced.

As for service, Royal maintains more than 900 service centers able to give you prompt, efficient, accurate help, if needed.



STANDARD, ELECTRIC, PORTABLE TYPEWRITERS
Roytype* business supplies

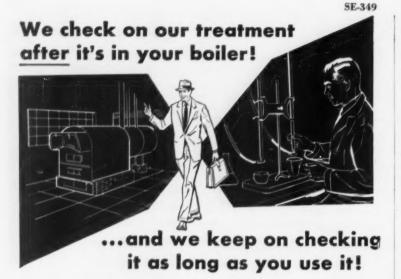
Royal Typewriter Company, Division of Royal McBee Corporation

In addition, Royal offers free instructional demonstrations and provides students and teachers with a wealth of typing and teaching aids.

In business, Royals are preferred 2½ to 1 by people who type. It all adds up to this: you'll want your school and your typing classes to use the World's Number 1 Typewriter!

CLIP COUPON

Royal Typewriter C School Dept., New	
Please have a Sch	nool Representative arrange for a the new Royal Typewriter without
Name	
School	
City	State



The Acme Service Engineer by personal calls, and we in the Laboratory by testing your treated boiler water, make periodic checks to assure that our treatment is doing the job it's supposed to do—protecting your boiler against scale and corrosion. And at no additional cost to you! That's what you get with

Acme RUSTOSCALE® Boiler Water Treatment

To begin with, the formula of Rustoscale we prescribe for your boiler is compounded from an analysis of your boiler supply water, and from a thorough study of your boiler's function.

Once our treatment is in your boiler, we watch its effect by making tests, every 30 or 60 days, of the treated water—alert for any change that might mean a change in formula or dosage. After each test we send you a report with recommendations. A copy goes to your Acme Service Engineer, so that he, too knows what's going in your boiler at all times.

RUSTOSCALE
IS NOW BEING
USED IN OVER
13,500 UNITS
IN THE U.S.
AND CANADA

GET A FREE WATER ANALYSIS-

Find out what goes on inside your boiler! No cost or obligation. The Rustoscale Laboratory will make a free analysis of your boiler and supply water and report to you in writing. Just fill out and mail the coupon... the Acme Service Engineer in your locality will obtain water samples and necessary data from you.

ACM	AE CHEMICAL CO., Dept. SX-6, 2506 N. 32nd St., Milwaukee 45, Wis. Please have your Service Engineer arrange a free analysis of our boiler and supply water, at no cost or obligation to us.
NAMI	OF SCHOOL
ADDR	£\$5
CITY.	STATE
SIGN	ED
<u></u>	ACME Chemical Company TOR OVER STATE YEARS QUALITY ABOVE ALL ALLWANDER 45. WISCONSIN

SPOTLIGHT_

now headed by Albert N. Jorgensen, president, University of Connecticut, are offering testimony. This is the first serious attempt of a commercial organization to secure an educational assignment.

A decision in favor of the commercial organization would, JCET feels, be a precedent negating the principle adopted by the Commission, which assured education's rights in this area of the public domain.

There are now fifteen educational stations in operation and 34 permits granted for the establishment of such stations.

School & Press Have Much In Common, Meeting Finds

CAMBRIDGE, Mass.—Newspapers and school administrators from eleven American cities met here recently to improve relations between school and press and to stimulate cooperation in telling the story of education to the readers of the daily and weekly press.

The conference found, according to its official report, "that education and the press have more in common than in controversy.

"The differences are real, few, and not beyond resolve. Good school reporting is a good business for the press; to education it is a necessary condition for success."

Schools a big story

Education has become a big story in America, and public interest in what goes on in the nation's schools calls for continuing attention by the press and full cooperation of school officials to inform parents and taxpayers, the conference stated.

The three-week conference was conducted by the Nieman Foundation for Journalism at Harvard University on a grant by the Fund for the Advancement of Education.

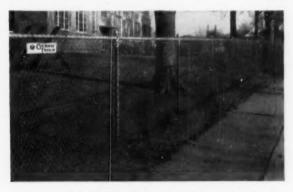
The newspapermen and educators considered means of more conscious effort in their cities to tell the story of education in the school year opening this fall.

Educational leaders and newspaper editors led discussions at their seminars on major problems in eduCyclone Fence...

...protects scholars ...protects schools



CYCLONE FENCE PROTECTS THE STUDENTS. Grade school children or high school faotball teams are equally well protected when at play behind that Cyclone Fence. This unusual installation shows how versatile Cyclone Fence can be. Here it not only encloses the athletic field but protects a too enthusiastic player from a nasty fall.



CYCLONE FENCE PROTECTS SCHOOL PROPERTY. Passers-by keep right on going by the school yard that's fenced with strong, sturdy Cyclone Fence. There's no possibility of short-cuts, no encouragement for vagrants to linger here. Cyclone Fence establishes the boundaries of the school property, gives a neat, finished look to the grounds.

NO JOB IS TOO LARGE— NO JOB IS TOO SMALL FOR CYCLONE*

*Cyclone is the trade-mark name of fence made only by Cyclone Accept no substitute.

CYCLONE FENCE DEPT., AMERICAN STEEL & WIRE DIVISION UNITED STATES STEEL CORPORATION

WAUKEGAN, ILLINOIS - SALES OFFICES COAST TO COAST UNITED STATES STEEL EXPORT COMPANY, NEW YORK CYCLONE FENCE CREATES SPECIAL EQUIPMENT. A typical example of modern, school equipment is this multiple-set sized tennis court. Strong, good-looking Cyclone Chain Link Fabric is fabricated into Cyclone Tennis Court Enclosures . . . will take many years of battering by tennis balls without denting, chipping or other damage.

You can buy cheaper fence than Cyclone, but it will cost you more per year. Cyclone gives full value for your dollar. Nothing but brand-new, top-quality material is used throughout. Posts and top rails are heavy and rigid. Gates won't drag. The chain link fabric is woven from heavy steel wire and galvanized after weaving for greatest resistance to rust and corrosion. And Cyclone is erected by full-time, Cyclone-trained experts.

Our engineers, located in principal cities, will gladly supply you with data, and advice on your particular school fencing job. Write or phone for this free service.

	m	nie 6	0010	N FO		E EITE		***		
Cyclone	Fence	, Dep	1. 3-1	05, W	oukeg	an, III.				
Please	end r	ne wi	ithout	obliga	ation,	compl	ele	info	matio	n o
Cyclone	Fence	and	Gates	k.						
Name .										
Address										
						. State				

USS CYCLONE FENCE

SEE THE UNITED STATES STEEL HOUR. It's a full-hour TV program presented every other week by United States Steel. Consult your local newspaper for time and station

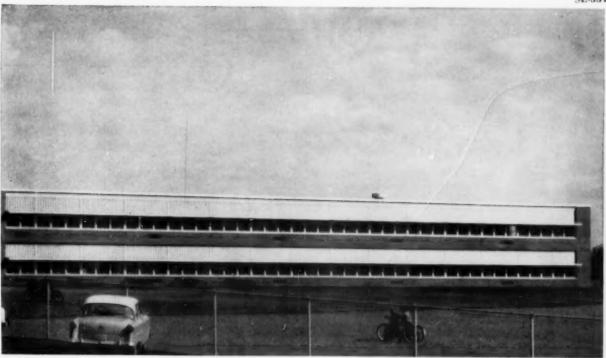




Architects: Bissell and Belair, A.I.A., Minneapolis, Minnesota.

"We get the protection of controlled daylighting with





masonry and PC Glass Blocks"

says Mr. Harold R. Enestvedt, Superintendent, Independent School District No. 205, St. Louis Park, Minnesota.



At the Park Knoll School in St. Louis Park. Minn., the playground is hard by the west side of the school. Yet it is next to impossible for random, flying baseballs to break the rugged PC Glass Block panels. The same panels effect a 40 decibel reduction in transmitted sound, so the classrooms can be kept quiet.

In case you've never been to Minnesota, it gets cold up there. Not the simple cold that most Americans experience, but a bitter, stinging zero and below for days on end. The PC Glass Blocks in this school are well suited for this climate, because they have the insulating effi-

ciency of an 8-inch masonry wall. Fuel bills are lower, and condensation is practically unheard of.

Best of all, of course, is the daylighting. The PC Glass Blocks contain built-in prisms that direct the light onto the ceiling, thus creating a natural lighting system that's easy on the eyes. Window shades or blinds are not needed.

To learn more about PC Glass Blocks, write to Pittsburgh Corning Corp., Dept. 1050, One Gateway Center, Pittsburgh 22, Pa. In Canada: 57 Bloor St. W., Toronto, Ontario.

PC Glass Blocks



ALSO SKYTROL AND FOAMGLAS





#450 - IRN equipped with burner destroys 500 pounds of refuse per hour.

Now is the time to equip your school with the most modern way to dispose of rubbish, garbage and other waste. . . a Joseph Goder Incinerator! Its efficient and sanitary operation makes it the favorite of schools everywhere. All but smokeless in operation.

Whatever your need . . . small prefabricated incinerators . . . or a large custom-built installation . . , you can depend on Joseph Goder to do the job BETTER!



Typical of a Joseph Goder Installation is found at 5t. Vincent's College of Nursing. Los Angeles, Calif., where a #450-SR incherator was installed. Architects—Austin, Field & Fry, Los Angeles. Contractor—James I. Barnes Construction Co.

1997		"	VAL	te i	OB	a.r	10	8 8	\mathcal{U}	1.6	L		Ш
100	1004			41	141 hice	N.	H	871	ore			rat	001
Please Goder BLUE	Incli	neral											
Name			v.a.e.		***								
Behool													
Address													
						ne.							

SPOTLIGHT

cation and communication.

The conferees were officials designated by nine public school systems and seven colleges, and the education reporters from thirteen of the sixteen newspapers in the same cities.

The public school systems officially represented were Portland, Ore.; Denver; Toledo; Nashville; Louisville; Houston; Bay City, Mich.; Corning, N. Y.; and Providence.

The colleges represented were: Reed College, University of Oregon. University of Denver, University of Toledo, George Peabody College for Teachers, University of Louisville and Brown University.

The newspapers participating were Portland Oregonian, Oregon Journal, Denver Post, Rocky Mountain News, Toledo Blade, Louisville Courier-Journal, Houston Post, Nashville Tennessean, Nashville Banner, Bay City Times, Corning Leader, Providence Journal, Charlotte Observer

and Worcester Telegram.

The conference members organized a cooperative undertaking to circulate among all members the major educational reports carried in the newspapers during the coming school year, with special attention to new areas of reporting on school activities and to articles interpreting educational developments and issues.

"The principal complaint of the press, is that it has insufficient access to information," read the conference report.

Fixed responsibility

"Schoolmen complain of a lack of fixed responsibility on the newspaper staff for educational reporting, and a seeming indifference to the why and how of teaching and learning.

"This leads into the question of the character and philosophy of 'open' board meetings, and the opening of the classroom to reportorial observation."

"However, education is too important to the American people to be

free catalog

start it is to a such a

sico Tip-Top | Table answers the need for a low cost, easily portable table that seats more in less space and requires little storage area. Produces complete multi-use of space and much lower maintenance costs. Tip-Top with attached benches folds and unfolds quickly, simply, without locks or latches. Seats up to 12 children, stores in an area only 1 ft, wide. Top is tough, mellamine plastic with smooth, rounded edges. Frame is heavy, 14 gauge structural steel, lustron plated for permanent protection. Vertical grain fir benches and 4 in. rubber casters. Available in 6', 7' and 8' lengths.

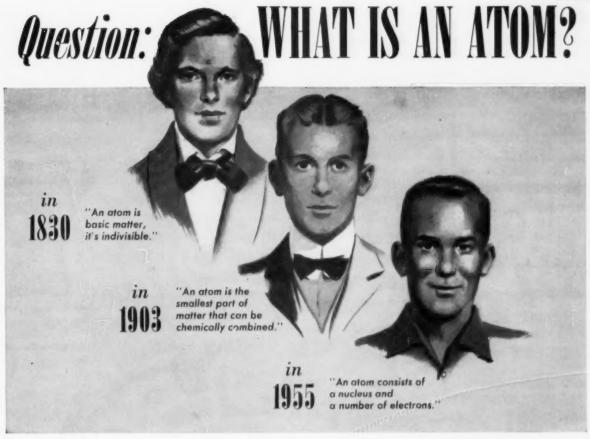
free catalog—illustrates and describes the complete SICO line of tables for every need and the SICO System of school and institutional seating for greater savings in time, space and money. Write today.

9000

manufacturing company

Dept. 401, 6045 Pillsbury Avenue South Minneapolis 19, Minnesota

"See Us at the S.B.O. Convention, Chicago, October 16-20 Space 100-101 and at the A.S.F.S.A. Convention, Denver, October 31-Nov. 3 Space 5."



Each boy scores 100%...for his time!

Knowledge grows. Discoveries are made. Devices are invented. People are born and become famous. Ways of life alter. Yesterday's fact is often today's legend.

And yesterday's encyclopedia is not good enough for today. That's why today's Americana is continually revised—guaranteeing you an Americana which describes—comprehensively and accurately—developments in the modern world. The Americana of five years ago did not have the hydrogen bomb, the atomic submarine, NATO, Cinerama, Cybernetics, a full treatment of Antibiotics, and hundreds of biographies of men and women in the news. Thus the 1955 Americana is almost a new work as compared with The Americana of five years ago.

THE NEW 1955 AMERICANA 25,500 pages

60,000 articles

10,000 illustrations

44,000 cross references 280,000 index entries

20,000 pages completely revised (1950-1955)



The International Reference Work 2 West 45th Street, New York 36, N. Y.

School Master Projectors free with **SVE** "Filmstrip-Projector" Plans

"Fi

Now you can get the best... and the most... with your audio-visual dollars! It's simple with these special SVE "package plans". Select from unexcelled filmstrip teaching materials and receive a School Master 300 or 500 projector free! To assure your school system of the finest, get the facts without delay — there is no obligation.

School Master 300 \$64.50



PLAN NO. 1

With every \$200.00 order for filmstrips or slidesets selected from the SVE Educational Catalog, you will receive a \$64.50 School Master 300 Projector free of extra cost!

School Master 500 \$84.50



PLAN NO. 2

With every \$300.00 order for filmstrips or slidesets selected from the SVE Educational Catalog, you will receive an \$84.50 School Master 500 Projector free of extra cost!

SOCIETY FOR VISUAL EDUCATION, INC.

SOCIETY FOR VISUAL EDUCATION, INC. IA BUSINESS CORPORATION) 1345 Diversey Parkway, Chicage 14, Illinois GENTLEMEN: Please send your new Educational Catalog and "Filmstrip-Projector" Plans information. It is free of cost or obligation. Include the name of my authorized SVE Audio-Visual Dealer. Nume.	New S6-page SVE Educa- tional Catalog gives de- scriptions, illustrations and prices of thousands of film- strips, slidesets, visual equipment and accessories. Provides a ready-reference guide for all your audia- visual needs. A valiable without cost or obligation.	SVE
School Address Zone State	WRITE FOR YOUR FREE COPY OF THIS VALUABLE 56-PAGE CATALOG TODAY	A SUBSIDIARY OF GENERAL PRECISION EQUIPMENT CORPORATION

SPOTLIGHT

unnecessarily the object of misunderstanding and misinterpretation," the report continued.

"If the story of education is to be well told, education and the press must serve with mutual respect, mutual trust, and above all mutual accessibility.

"Whenever motives are suspect they should be measured against the common goal of both education and the press—the making of better communities."

No set pattern

The report further held that "there is no standard pattern for education-press relations.

"The diversity of community life, of school systems and of the press itself precludes the laying down of a master plan. Yet by taking thought together, education-press relations can everywhere be improved."

The education story can be better told, the report went on.

"Education and the press have found it easier to convey information to the public about school plant, personnel and pupils than about purposes, program and processes. The latter are most in need of attention."

Dearborn Students Garden On 17-Acre School Plot

DEARBORN, Mich.—Sixth- and seventh-grade children in this Detroit suburb have seventeen acres of school-owned land to study gardening on.

On a plot belonging to the board of education, the students raise produce, study insects and practice soil conservation.

Street Appointed Head Of NEA Centennial

Washington—Paul Street, director of regional services, Northern Illinois State College, DeKalb, has been appointed director of the Centennial Celebration of the Nea, according to William G. Carr, executive secretary.

Dr. Street, who will be on leave of absence from NISC for the next two



Your mathematics department probably would state it thus: $H \div P = C +$ (or Halls divided by Pella wood folding doors equal More Classrooms). It's the answer to today's problem of too many pupils for too few classrooms.

PELLA DOORS are actually "folding walls"! Large areas such as study halls, cafeterias, and large classrooms can be divided within that interval between classes and re-opened just as quickly and easily . . . PELLA DOORS also make excellent cloakroom and storage space closures as there is no "door-swing" with which to contend.

PELLA WOOD FOLDING DOORS are of solid wood panel construction—spring-hinged for feather-touch operation. Available in beautiful veneers of selected birch, oak, pine, and Philippine mahogany, either finished or unfinished. When closed, PELLA DOORS possess excellent acoustical characteristics and have been tested by Armour Research Foundation's Acoustical Laboratories for their sound-retardant properties. PELLA DOORS are pre-fitted and factory-assembled for quick, easy installation.

Send for FREE literature and name of nearest PELLA dealer.



CLIP AND MAIL TODAY!

ROLSCREEN COMPANY, Dept. G-72, PELLA, IOWA

GENTLEMEN: Please send FREE literature showing how to use PELLA WOOD FOLDING DOORS and name of nearest Pella dealer.

NAME		-
ADDRESS		
CITY & ZORE	STATE	-



Sparkling Church Wall Tile in Feam Green with Ivory Trim forms a cheerful background for this cafeteria setting.

BRIGHTER, MORE COLORFUL EASIER-TO-KEEP-CLEAN WALLS FOR SCHOOL CAFETERIAS

No excuse now for hard-to-clean walls in your school cafeteria (or in toilets, halls, stairwells, etc.)—walls that need constant attention and periodic expensive redecoration.

Church Plastic Wall Tile is the ideal beauty treatment for school walls. In school after school, installations like the one shown above have improved appearance and sanitation, reduced maintenance and actually inspired student cooperation in keeping walls clean and unmarked.

In several styles, and a wide variety of colors, Church Tile is economical to install, can be applied to almost any smooth dry surface, usually without any necessity for structural changes. Church Tile can't crack, chip, peel or fade, resists soil, cleans with the swish of a damp cloth. It's the modern way to give old walls new life and beauty.

IF YOU HAVE A PROBLEM

in maintenance or decoration write us today for colorful illustrated brochure and full information about Church Tile. Free, of course. Please address Dept. S.

C. F. CHURCH MFG. COMPANY
HOLYOKE . MASSACHUSETTS

American - Standard



Made by the makers of

SPOTLIGHT_

years, assumed his new duties September 1.

He will work with members of the NEA Centennial Commission to coordinate and initiate activities and projects to bring to the attention of the public the needs, aims and achievements of the schools.

NEA will observe its 100th anniversary in 1957.

New NEA Film Has Junior High Setting

WASHINGTON—Mike Makes His Mark, newest in the public relations film series produced by NEA and the state education associations, was well-received at its premier showing at the NEA Chicago convention, reports William G. Carr, executive secretary.

The film has a junior high school background. Its predecessor, *Skippy and the 3 R's*, was taken against first-grade scenes.

Mike has been cleared for TV use. Available in color or black and white, the 29-minute sound film can be borrowed from state education associations or purchased from NEA's Division of Press and Radio Relations, 1201 Sixteenth St., N. W., Washington 6.

In addition to the longer films, ten one-minute long TV spot films have been produced by NEA under the series title Good Schools Make a Difference.

The Division of Press and Radio Relations reports that "almost without exception, TV stations have accepted the spot films when they have been offered."

Meanwhile, the film Fire in Their Learning, produced by NEA's National Commission on Safety Education, was awarded a Recognition of Merit Certificate in the Golden Reel Film Festival.

The Festival is sponsored annually by the Film Council of America.

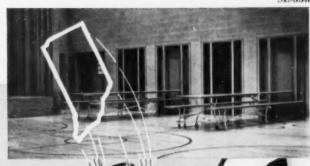
Federal Relations Regionals Set by Legislative Comm.

Washington—The Legislative Commission of NEA has scheduled a series

INDIANA for instance

North Side School, Mishawaka, Indiana (second installation in this city)

Dr. John J. Young, Supt. of Schools Mauer and Mauer, Architects



You'll find Schieber
Folding Tables & Benches
In Schools Everywhere

Ever consider why school architects almost always specify SCHIEBER?

They have confidence in Schieber based on their own experience with the equipment.

They are impressed with the 24 year record of satisfactory service delivered by Schieber equipment.

They hesitate to "go out on a limb" by specifying equipment of lighter construction and unproved engineering.

School people are familiar with Schieber equipment and like its many features such as permanently bright and clean stainless trim, oil-less bearing casters, safety locks, etc. 24 years ago Schieber made its first installation and the equipment is still in daily use. Schieber's designs and rugged quality construction have made the multi-purpose area practical. Today the economies it affords are given serious consideration in the planning of every school and with few exceptions, Schieber equipment is specified.

Schieber
SALES COMPANY
Detroit 39, Michigan

REPRESENTATIVES

In Canada Montreal: Madden-Cummins, Ltd. Raymond Hardware, Ltd.

Vancouver: LaSalle Recreation, Ltd.







ORIGINATORS OF MULTI-PURPOSE LUNCHROOM EQUIPMENT



The LOXIT Chalkboard System is a Complete System"

· It provides the answers to all your chalkboard problems by bringing to you all the advantages of expert design, precision engineering and painstaking manufacture in a remarkably complete line of chalkboards, tackboards, bulletin boards, trim, and related items. The Loxit Chalkboard System is a complete package, tailored to fit your specific needs with the utmost in simplicity, effectiveness and economy.

LOXIT provides all this:

RITE GREEN AND DARKRITE GREEN CHALKBOARDS-

proven in successful installations all over the United States

KOMPO-CITE CHALKBOARDS-

to meet budget requirements with good quality as well as economy

PETRALOX CHALKBOARDS-

a cement-asbestos chalkboard with the same fine writing surface of RITE GREEN.

PORCELOX CHALKBOARDS-

porcelain enamel on 16 gauge steel for a lifetime of satisfying use.

All Loxit Chalkboards can be washed as often as desired.

LOXIKORK TACKBOARDS-

a closely grained uniform surface that stays soft and spongy-nine colors.

TRU-SNAP ALL-ALUMINUM TRIMfor both plastered-in and surface-

applied installations. KOMPO-THRIFT TRIMS-

the companion trim to the thrifty KOMPO-CITE Chalkboards.

COMPLETELY TRIMMED-

Chalkboards and Tackboards complete, ready to hana.

BULLETIN BOARDS-

Sliding Boards, Trophy Cases, etc.

Literature, catalogs and samples are available. Write today.

LOXIT SYSTEMS, INC. 1217 W. WASHINGTON BLVD. CHICAGO 7, ILLINOIS

SPOTLIGHT

of regional federal relations conferences in October and November this year in cooperation with the NEA Division of Legislation and Federal

Present plans call for statewide and congressional district conferences in the following states: Arizona, California, Colorado, Connecticut, Montana, New York, North Carolina, Ohio, Oregon, Pennsylvania and New Jersey.

A special conference for the New England states also is tentatively scheduled in Boston during the same

A meeting of federal relations chairmen from every state, scheduled to be held in Chicago, December 10-11, will climax the regional discussions of federal relations problems.

"Box Score on the UN" Available from CIR

WASHINGTON-Box Score on the UN: 1945-55, an inventory of major UN actions, is now available in its fifth edition from NEA's Committee on International Relations.

Complimentary copies of Box Score were distributed at the recent UN Tenth Anniversary meeting in San Francisco. The 1954 edition had a circulation of over 3 million.

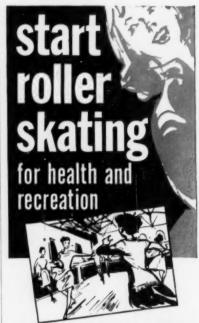
The chart may be purchased from CIR, 1201 Sixteenth St., N. W., Washington 6, D. C.

Administration in Higher Ed Is Difficult Task—Perkins

CAMBRIDGE, Mass. - Administration in higher education is "a vitally necessary function, one of the most difficult of all areas of administrative activity and an undertaking to be consciously prepared for," according to John A. Perkins, president, University of Delaware.

Dr. Perkins addressed delegates of colleges and universities from 23 states, the District of Columbia and Puerto Rico, at the meeting here of the National Association of Student Personnel Administrators.

"Authorities have classified types of administration as to difficulty," the



WONDERFUL SPORT at low cost and upkeep

It's easy to start a roller skating program! It's a healthful exercise and the popular way to build strong bodies. A favorite with boys and girls and budget planners, too . . . roller skating makes a grand corecreational activity. Handles the largest groups quickly and easily. Halls, gyms, or any large floor area make fine roller rinks. Invest in health and fun this season.



GUARANTEED

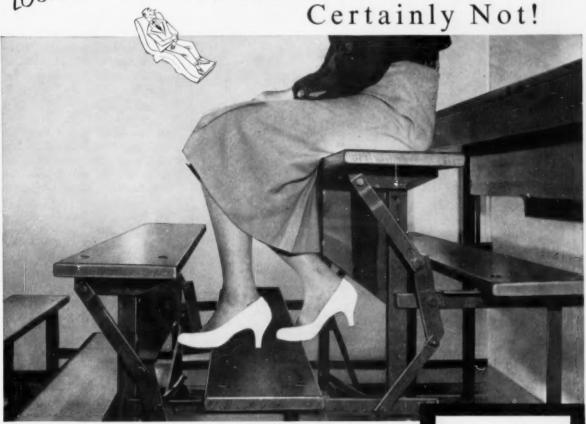
-- NOT TO MAR, SCRATCH OR DAMAGE--

Rink clamp skates developed by CHICAGO specially for skating on waxed floors. The rubber wheels are ideal for use on tile, ballroom floors or any highly waxed surface. Will not harm or mark.

Write Now to the Leader in Rink Skates on How to Start

The Choice of Champions . . . for over 45 Years 4476 WEST LAKE STREET-CHICAGO 24, ILL.

LOUNGE CHAIRS FOR GYMNASIUM SEATING?



BUT YOU CAN ASSURE MAXIMUM COMFORT WITH UNIVERSAL ROLL-A-WAY BLEACHERS

No gymnasium bleacher is like a lounge chair. But ask for a seat demonstration of *Universal* Roll-A-Way Bleachers and you'll ap-

preciate what we mean by maximum spectator comfort... in minimum space. Notice the spectator's natural position while seated. Make all the tests you wish... with feet forward or drawn back under the seats. Compare design, construction, dimensions, seating area... and you'll find that Universal Roll-A-Way Bleachers offer the greatest possible comfort in gymnasium seating. Write today for free catalog.

This
Experienced
Man Will
Show You...

... what this extra

He is Universal's representative in the greater New York area... Brad Layburn of Bradley M. Layburn Co., 461 Eighth Ave., New York City. If you are in his territory, don't hesitate to call him.



UNIVERSAL BLEACHER COMPANY

Champaign, Illinois • Representatives in principal cities

MORE COMFORTABLE LEG ROOM THAN ANY OTHER

The extra distance from seat board to foot board (181/3") and the position of the vertical filler or riser board (centered under seat) assure maximum space per person seated . . . permitting normal position of feet drawn back for natural balance. Compare this with the other stands which have 2" to 3" less space and vertical filler boards flush with seat fronts.

SF-363

SPOTLIGHT_

FAST, EASY and EFFICIENT

... with Geerpres mop wringers. Mops last longer and do more work because Geerpres Interlock gearing lets you wring mop just the way you want it without twisting or tearing. Light handle pressure gives controlled, powerful squeezing action to force mop down and eliminate splashing.

Geerpres wringers last longer because they are ruggedly constructed of the finest materials. Electro-plated finish on all wringers is exclusive with Geerpres. Yet, they are light, compact and easy to handle on ball-bearing rubber casters.

Sizes and styles for every mopping need. Complete line of accessories, too. Write for Catalog or see your jobber.

GEERPRES WRINGER, INC.

BOX 658

MUSKEGON, MICHIGAN

For more than sixty years Peterson furniture has set the pace for style and design. Peterson engineers and leading educators, studying together the requirements of school furniture under actual working conditions, have built into each piece of equipment a quality and workability that has made Peterson the leading choice of educators for many years.

Our representative will gladly assist in any problem you may have . . . or if you prefer, write on your letterhead for our illustrated catalog.

LEONARD PETERSON & CO., INC.

1232 FULLERTON AVENUE CHICAGO 14, ILLINOIS

Delaware president said.

"The military situation in which the executive can command is declared the easiest. The most difficult is where sanctions are few and cooperation must be voluntarily achieved.

"It is wise that you as student personnel administrators should be telescoping other people's administrative adventures through formal training and be studying the tried and untried theories of administration."

Dr. Perkins cited the meaning of the term POSDCORB, used in the literature of public administration by Dr. Luther Gulick.

The term refers to the most common tools of administrative work: planning, organization, staffing, directing, coordinating, reporting and budgeting.

All are necessary for effective work, the speaker explained.

British Pupils Learn Math, Geography, from Plane Trip

LONDON—School children from Britain's Midlands are learning geography, mathematics, science and history in modern, streamlined airlines between Birmingham and this city.

The lessons in "flying classrooms" began last summer when British European Airways suggested that students from the Midlands might like to fill the empty seats on planes to London.

The charge was set at ten shillings (\$1.40), with the understanding that if a full-fare passenger wanted a seat, the child must give way.

School boards took the offer up right away. Last summer, BEA carried 75 school parties of 1,125 children from areas around Birmingham.

Soon schools from as far away as Bristol in the West of England began to apply, and the airlines accepted them on provision that they come to Birmingham first.

This year, 1,000 students took the trip between April and July alone.

One particular incident indicates how students and teachers take ad-



LABORATORY

ART ROOM

AND

HOME MAKING

Floor-King

Mopping Outfit or maps to 36 o

WANT TO MAKE EXTRA MONEY FOR YOUR SCHOOL?

YOU CAN WITH



THE NEW MANLEY **REFRESHERETTE**®

(SERVES HOT DOGS AND COLD DRINKS)



THE NEW MANLEY COLISEUM

(SERVES POPCORN AND COLD DRINKS)

Here, At Last, Is "Packaged" Equipment That Is Ideal For School Refreshment Stands

When the crowds gather at school sporting events, dances and other activities, they want refreshments. And here's how you can provide refreshments for these hungry, thirsty, crowds and, at the same time, earn extra money for your school to use for extra-curricular activities - install and operate this new, Manley equipment.

The Manley REFRESHERETTE is a combination hot dog and cold drink machine . . . the COLISEUM is a combination popcorn and cold drink machine. Both machines are ideally suited for school operation and require only 14 square feet of floor space.

Let this new, modern Manley equipment help you and your school earn extra money for: sporting equipment; social activities; athletic events; band uniforms and instruments and many other things students need and deserve. Other schools, just like your own, have found that the Manley Snack Bar Plan and equipment is the way to obtain needed extra funds.

SO EASY TO OPERATE!

Both the REFRESHERETTE and the COLI-SEUM come to you ready for your school to begin operating immediately. All you do is install the machine and it's ready to go to work. All you have to provide is a student to operate the equipment. All Manley equipment is designed for simple operation . . . even the most inexperienced students can operate this equipment easily, efficiently and profitably.

TAKE THREE MINUTES AND THREE CENTS TO FIND OUT HOW YOUR SCHOOL CAN BENEFITI

Just fill out the coupon and mail it to Manley. Let us know if you want a representative to call, or if you prefer to have us send you additional information on the Manley REFRESHERETTE or the COLISEUM.

MANLEY, INC. Dept. SE-1055 1920 Wyandotte Street, Kansas City, Missouri

Please send me additional information on the Manley REFRESHERETTE. Please send me additional information on the Manley

COLISEUM. Please have a representative cell on me. I under-

stand that I will be under absolutely no obligation. Title ..

School

Samsonite presents a totally new

Totally new in Color, Comfort and Line ...



The Mobile Samsonite Open Front Desk gives maximum storage space! Forms related unit with matching Pivot-Back chair.

New Samsonite Pivot-Back Chair has silent, rubbercushioned glides, kick-proof "spats". Pivot-back swivels silently, adjusts to individual body contours.

NEW CATALOGUE

New Samsonite Classroom Furniture Catalogue. Complete specifications on new Samsonite Classroom Furniture. Fully illustrated in color. Write Shwayder Bros., Dept. F-11, Classroom Furniture Division, Detroit 29, Mich. for a copy and for the name of your nearest distributor.

Makers of the famous Samsonite

Samsonite

concept in Classroom Furniture

actually aids the Educative Process!

Samsonite has created an entirely new concept in Classroom furniture...as exciting as it is practical.

4 Paint-Box Colors make classrooms bright and fun to work in! Tested on school officials in 30 states, the colors mix or match harmoniously, blend with every wall color! Shaped for Tomorrow! The gracefully curved contours are posture-designed to build healthy bodies, make attention less tiring, learning more fun!

Miracle of Mobility! Mix these units, move them room to room, with never a conflict in color or contour. Mischief-Proof! Aluminum "spats" on legs defy kick and mop marks! Desk-lid hinges and countersunk "bumpers" can't be loosened, even with a screwdriver!

It's Not Expensive! Samsonite actually costs less than old-fashioned furniture... because it's strongest, lasts longest!



A new note in schoolroom furniture, Samsonite's Round Table lends an informal, non-institutional look to the classroom!



290 square inches of writing surface! New Samsonite Tablet Desk Chair plays multiple roles in classroom, meeting rooms, lunchroom.



Samsonite's colorful List-Lid Desk is noiseless, slam-proof, tamper-proof. Fingers can't be caught between lid and book box.



Tablet-Arm
Chair with
generous writing
surface positioned
for natural
writing posture.
Sturdy tubular
steel supports.
Easy slide-in,
slide-out is provided
by lines and
curve of
tablet arm.
Right or left hand,



Plenty of leg room and storage space! The Samsonite Shelf Desk brings modern color, graceful lines to the classroom.



folding tables and chairs for every institutional use!

... the Classroom Furniture that's STRONGEST... LASTS LONGEST!

*Design and structural patents pending
SHWAYDER BROS., INC., CLASSROOM FURNITURE DIVISION, DEPT. F-11, DETROIT 29, MICH. Also makers of famous Samsonite Luggage and Card Tables
and Chairs for the Home.

Newness of line

brilliance of color, keynote Samsonite's *Teacher's Desk*. Maximum work and storage



He's SAFE



He's OUT

The base runner is SAFE—sliding under the catcher's tag to win the World Series.

The victim of a slippery floor is OUT
—out of action with a possible fracture
—and you may be out several thousand
dollars.

Play it Safe by maintaining your floors with Legsure, the new Legge polish that gleams without slipperiness. You'll prevent slip-fall accidents because Legsure goes up to 75% beyond U. L. requirements for slip-resistance.

And you'll save important maintenance dollars. Legsure never needs buffing. Stays on longer. Rarely requires the labor-consuming job of stripping.

Do as administrators of leading hospitals, institutions, industrial and munici-

pal buildings are doing. Switch to Legsure—and be sure. Get full information on Legsure now. Clip this coupon today.



De	alter G. Legge Company, Inc. pt.D-10,101 Park Ave., New York 12 anch offices in principal cities. Toronto—J. W. Turner Co.
00	Please send full Information on LEGSURt Send a FREE copy of your floor maints nance booklet, "Mr. Higby and th Gramlin".
No	me
Fir	M
Str	est

Zone_

............

State

SPOTLIGHT_

vantage of the flight to learn mathematics. A party of 13 boys, all 15 or 16 years old, in their last term of high school, took the trip with their history and mathematics teachers.

At the start of the flight, the stewardess distributed maps which the boys studied closely, following the plane's route. Calculating the speed of the aircraft, a problem discussed the week before in school, one boy looked at his watch.

He estimated that the plane was



just north of Daventry, and would be overhead in about four minutes.

Just then, the stewardess brought a copy of the pilot's flight log, giving the plane's height, speed and position.

It indicated that the boy's calculations were right to the minute.

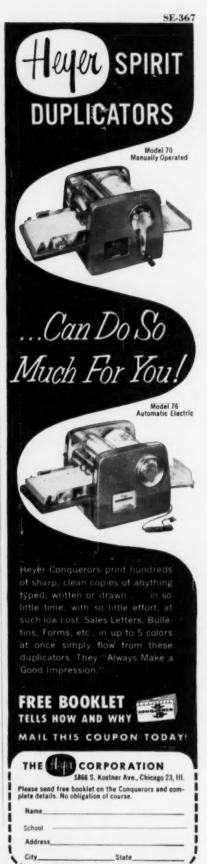
When the students arrive in London, they visit their local member of parliament, visit the House of Commons and the Palace of Westminster, take a trip on the River Thames to Greenwich where they visit the Maritime Museum, and take a bus tour of London.

TC Lay Conference Form Basis for NBC Series

NEW YORK—A ten-week radio series on important problems facing the nation's schools was presented through September 16 by the National Broadcasting Company in cooperation with Teachers College, Columbia University.

Titled "Citizens View the Public Schools," the series was broadcast weekly.

Each program consisted of a short lecture by an educator from Teachers College, followed by discussion between the professor and a group of adult laymen, previously tape-re-



City.



needed unchrooms

Here's how Mr. Eugene Silke, Superintendent, Springfield School District #19, Oregon, solved his lunchroom problems with Erickson Portable Fold-A-Way Tables.



in only 15 seconds



THEY WHEEL-A-WAY on rubber custers

THEY STORE-A-WAY in amazingly little space

Superintendent of the Springfield District #19 since 1940, Mr. Silke converts gyms into lunchrooms . . . in minutes!

Using Erickson extremely portable Fold-A-Way tables, Mr. Silke has the "extra" space he needs . . . through efficient multiple use of space.

Erickson's exclusive Fold-A-Way and Wheel-A-Way features make it possible for one man to set up seatingfor-eating for hundreds of pupils . . . in less time than it usually takes to change classes.

This rapid conversion keeps valuable floor space busy all day. Clean-up is easy . . . just a quick sweeping after tables are wheeled-a-way. When not in use, tables require amazingly little storage space. For example, 10 tables, seating capacity for 240 pupils, store in only 4½ by 10 ft. Tables take plenty of punishment . . . Erickson Patented understructure is built of 11/8" square formed steel tubing . . . to withstand eager youngsters, year after year.

Tables are colorful . . . tops and benches come in your choice of five colors . . . tough plastic laminate keeps tops and benches free of stains, scuff marks . . . cleaning is quick and easy.

Send us your floor plans. Let our engineers show you how to solve your space problems with extremely portable Erickson tables. You'll find that you're paying for Erickson tables when you don't have them.

THIS GYM BECOMES A LUNCHROOM IN 15 MINUTES



THIS GYM BECOMES A LUNCHROOM IN 15 MINUTES



The Springfield Junior High gym takes care of 220 students during the lunch hour. Afterwards, tables are removed quickly, a quick sweeping, and the gym is ready for phy. ed.

THIS GYM BECOMES A LUNCHROOM IN 15 MINUTES



	LDEMAN	· LTJ	OMME	MFG. C
Dept. SI	10 25	380 Universi	ty Ave., St. f	Paul 14, Mil
田田	\$ 1	EES.	60	9
Idway 5-6465	Fortside (legger	Comp to	- /	Sand Steeds
ENTLEMEN: Please rush id-A-Way Tables with Bo		information	on Erickson	Portable
Sme		Title		

PORTABLE FOLD-A-WAY PRODUCTS



One of Tomorrow's Most Important Sciences



NUCLEONICS

...teach its fundamentals with these precision instruments

A knowledge of the basic concepts of nucleonics is a must for every grade and high school student today. Regardless of what career your students ultimately pursue, nucleonics will have an important influence on their lives. For instance, great strides are being made in the use of nucleonics in preparation and preservation of food, the treatment of cancer, and the production of electric power

... as well as in submarine, ship and aircraft propulsion.

As part of its complete line of nuclear instruments, Curtiss-Wright now offers two radiation measurement instruments, especially suited for classroom and laboratory work . . . at special school prices that place them within reach of every science department. Pass these facts to your department heads.





CURTISS-WRIGHT

RADIATECTOR

- · "Click" indication of radio-activity
- Ultra-sensitive for laboratory and prospecting use
- · Powered by ordinary flashlight cell
- Shack resistant, reliable, weighs only 2 lbs.

THE RADIATECTOR provides a qualitative indication of gamma and X-rays by means of earphones. With its shield removed, it detects beta radiation. May be immersed in liquids for more accurate contamination checks. Machine aluminum case finished in grey enamel. Uranium ore sample included. Special school price only \$118.00 plus shipping.

CURTISS-WRIGHT

RADIAMETER

- Accurate meter indication of radioactivity
- Rugged and dependable
- Powered by ordinary flashlight cell
- Pocket size, lightweight

THE RADIAMETER gives an accurate meter indication of beta, gamma, and X-rays. Convenient shield permits separation of gamma from beta radiation. Two scales which require only 2.5 and 100 mh/hr for full needle deflection. Handy zero adjust knob. One-piece cast aluminum case finished in grey enamel. Special school price only \$151.00 with case plus shipping. Calibrated radium source \$13.00 extra.

Both instruments are ideally suited for laboratory work and uranium prospecting. The radiameter is also useful for civil defense. Neither requires an expensive battery supply. Instruction booklet containing easy-to-perform laboratory experiments is included. Foreword explains basic principles of radioactivity.

Write for Complete Details



SPOTLIGHT_

corded at a series of conferences for lay citizens held in New York at the 1955 summer session of TC.

Each broadcast was tape-recorded on the Columbia campus following the actual classroom session. The professor gave the highlights of the lecture he delivered earlier and three or four students took part in discussion.

Professor and NBC producer jointly selected student participants on the basis of articulateness in the previous classroom discussion of the subject.

Aim of series

"The aim of the series," reports Producer Doris Corwith, "is to help listeners understand the problems facing the public schools—the boards of education, the superintendents, and the teachers—and to show what the average citizen can do to share in the development of public education in this country."

Previous programs covered topics like "What are the 'Big Issues' in Education Today"?, "Who Makes Policy for the Public Schools"?, "To What Extent are Modern Teaching Methods Based on Reliable Knowledge About Learning"?, "What are the Essentials of a Good Public School Program in 1955"? "What is the Responsibility of the Public School for Fostering Mental Health"?, "How Do Our Public Schools Teach Citizenship"?.

Miss Frances Tells Parents About Teacher Shortage

NEW YORK—Miss Frances of the Ding Dong School is using her daily daytime television program to encourage the aid of parents in tackling the nationwide teacher shortage.

Frances Horwich, known on TV as Miss Frances, took up this subject twice a week recently during the parents' portion of the program.

She discussed the serious problem of the teacher shortage, and urged listeners to cooperate in encouraging friends and relatives to enter the teaching field.

"As a school teacher I want to

SPECIFICATIONS...

for Satisfying School Seating...



To Answer All These Specifications:

GRIGGS AIRLINER No. M-700 Desk with No. 740 Chair

FRAME:

0

Welded, Heavy-Gauge Tubular Steel

BOOK BOX:

Die-formed, heavy-gauge, embossed for strength.

DESK TOP:

Sturdy Hardwood Plywood. With or without plastic face.

COLORS:

METAL: (Check One) Taupe, Beige, Coral, Sage Green, or Ocean Blue.

WOOD: Natural or School Brown.

CHAIR:

Tubular frame, comfortably curved plywood seat and back.

LASTING QUALITIES: Good for Years.

Any information not covered in above specifications can be secured by writing your Griggs Distributor or direct to

Equipment Company

BOX 630 BELTON, TEXAS

0

When Student Safety is Your Responsibility



Joure sure with ward SAFEGUARD

Your new **ward** catalog is designed to show you how every safety and economy feature necessary for student protection and budget security is built into every **ward** SAFEGUARD School Bus. Your catalog is sent by return Air Mail. Write: **ward** Body Works, Dept. S-2, 4201 South Congress, Austin, Texas.



Manufactured at plants in Austin, Texas and Conway, Arkansas, and sold throughout the world! ward

SPOTLIGHT

help recruit youngsters in colleg and get them into teaching," Dr. Horwich feels.

"I'd like to show what teaching consists of, to show that teaching can be fun.

"Also, I'd like to point out to parents their responsibility to the classroom teacher in the community," she adds.

An authority on early childhood education, Dr. Horwich is a specialist as well in elementary education, parent education and teacher training, and administration and supervision.

U.S., Canadian Educators Discuss Cooperation at SU

SYRACUSE, N. Y.—A score of prominent educators from Canada and the United States, meeting recently at Syracuse University for the first Canadian-American Administrators Workshop, focused their attention on ways of building closer cooperation between the two nations.

In informal morning and afternoon sessions, the 20 educators worked on problems dealing with education, trade and commerce mutually shared by the neighboring countries.

Virgil M. Rogers, dean of Syracuse University's School of Education, organized and directed the workshop, offered by the university's Division of Summer Sessions.

Closer relationships

"We hope this international workshop will be a cornerstone in building the closer relationship between the United States and Canada which is evolving out of such developments as the St. Lawrence Seaway Project," Dr. Rogers declared.

Overcrowding of schools and student and teacher exchange programs were two of the pertinent educational topics covered during the two-week workshop.

Views on vital issues concerning both the United States and Canada were presented by leading school administrators.

Dr. C. C. Goldring, director of



Executone gives you instant voice-to-voice contact with every part of the school

Easier, more efficient administration can be achieved with this modern low cost intercom system. Executone meets all essential communication needs of every school!

Just push a button—for instant twoway contact with every classroom... to quickly locate roving personnel ... to make announcements.

Teacher's privacy protected—Principals can study teaching methods via Executone. An optional indicator lamp signals when the "line" to a class is open. Calls to principal's office are signalled by chime and light.

Emergencies-During fire, or air raid

drills, Executone prevents confusion
... quickly locates nurse or doctor
... safeguards life and property.

Easy to operate — dependable — This simplified intercom system has no complicated control panels...no microphones...no headsets or telephone receivers.

Easily installed in existing and proposed schools. Large or small schools can expand their Executone with record turntables, radio tuners and public address speakers.

A time clock can be used in conjunction with Executone to automatically signal class periods.

EXECUTONE, INC., Dopt. 4-9

- 4	WOOULONG
	<i>Xeculune</i>
1	AGUUIUIIG
5	CHOOL INTERCOM
	SYSTEMS
	Manufacturers of School-to-Home

telephone equipment for shut-ins Send for complete details. Mail coupon toda

	Free descri	ation please send: ptive literature. carest representative.
!	name	title
. !	school	
- 1	address	
. 1	city	state

education, Toronto, Canada, spoke on "Canadian-American Cooperation in Education on the Continent and Abroad."

"The Role of Schools in Preventing the Spread of Communism to the Western World," was the subject of Dr. H. I. Willett, superintendent of schools, Richmond, Va., and president, AASA.

123 School Bus Mechanics Attend Maintenance Classes

RUSSELLVILLE, Ark.—A five-day program on school bus maintenance was held on the campus of Arkansas Polytechnic Institute here recently.

The 123 students were school bus mechanics from Arkansas, who attended to learn new techniques and developments in vehicle maintenance.

Representatives of more than a dozen automotive and equipment manufacturers served as instructors in courses that covered such subjects as motor repair, welding, brake service and painting.

This was the fourth such state-wide training session sponsored by the State Department of Education. Launched five years ago with a two-day meeting at one of the state's rural schools, the first program attracted only twelve mechanics.

Since the inauguration of the statewide program, enrollment has grown steadily, with an increasing number of the state's school districts sending personnel.

According to Program Head, J. L. Eidson, state supervisor of school transportation, the program is showing good results.

"There has been a very definite improvement in the maintenance program at the local level," he said.

"About half of the schools operating buses now handle their own maintenance and repairs. By giving mechanics intensive practical training at our annual school, we give them exactly the kind of help they Joins NYSCCPS staff



Amelie S. Rothschild, who recently completed her second term on the Scarsdale, N. Y., board of education, has joined the staff of the New York State Citizens Committee for the Public Schools as executive assistant.

With experience as teacher, board member, parent and civic leader, Mrs. Rothschild will aid local citizens groups, develop special programs and help Violet Edwards, executive director, in state-wide conference work.

SE-373

METALAB Laboratories



For SCHOOLS

The design and planning of rooms and equipment for new school projects is an important responsibility to school administrators and architects. It is also a challenge to get the most and the best for the funds expended. Let METALAB be your equipment specialist.

THE Modern TREND

Your METALAB laboratories will be as outstanding a part of your project as the building structure itself. This fireproof, corrosion-resistant, economical equipment is highly functional and completely safe — a permanent investment which enhances your entire institution.



MITALIA MITALI

242 Duffy Avenue, Hicksville, L.I., New York lease send a copy of your new 180-p. Cat. 48; condensed Educationa; Cat. EC:		
Name	Title	
Institution		
Address		
City	Zone State	

need to safeguard a community's investment in buses."

Cooperating manufacturers have been very generous in sending trained personnel to teach at the school, Mr. Eidson pointed out.

This year, 21 representatives took part in the sessions.

Community Groups Study School Science, Math Needs

New York—Leaders in science, business, industry and education who are concerned with the teaching of mathematics and science in secondary schools met recently to talk things over with members of the board of directors of the New York State Citizens Committee for the Public Schools.

The group defined the problems facing metropolitan area schools and explored ways in which the citizens committee could be of help.

Represented at the meeting were groups like the Engineering Man-

more than a

SCRUBBABLE WALL PAINT

PRATT & LAMBERT NEW LYT-ALL FLOWING FLAT offers you more than maximum scrubbability. More than maintenance economy. More, too, than easy application, exceptional hiding, flawless smoothness and uniformity. More than freedom from objectionable odor. Here's the BIG PLUS when you use Pratt & Lambert New Lyt-all Flowing Flat:

on-the-spot color styling with

Pratt & Lambert Calibrated Colors to
make yours the best-looking school in town!



New Lyt-all Flowing Flat colors are Pratt & Lambert exclusives — painstakingly and expertly selected — scientifically calibrated for correct hue, chroma and value. They're always right — never too bright, washed-out or drab. Furthermore,

your Pratt & Lambert representative is trained to give you personal, prompt and expert Color Styling Service — to help you create an atmosphere of cheerfulness and distinction. His service and assistance are yours for the asking. Write or use the coupon below.



PRATT & LAMBERT-INC.

A Dependable Name in Paint since 1849

NEW YORK • BUFFALO • CHICAGO • FORT ERIE, ONTARIO

In Canada Write: PRATT & LAMBERT-Inc. 80 Courtwright Street Fort Erie, Ontario 136 Tonawanda St., Buffalo 7, N. Y.

.

We'd like to know more about the Pratt & Lambert personalized Color Styling Service for Schools.

Name Position

School

e e e e e e e e e e e e e e e e e e e

CLARIN PERMANENTLY STAMPS YOUR

STAMP OF APPROVAL!



Proof of the respected and unrivalled CLARIN guarantee is stamped into one of the sturdy steel legs of every CLARIN chair . . . obvious assurance that you purchased the best Every CLARIN chair is guaranteed for a period of ten years from the date stamped therein.

QUALITY IS THE ONLY TRUE ECONOMY...AND



QUALITY



When you put CLARIN chairs to work, you know they will stay on the job . . . day in day out . . . from classroom to assembly hall to meeting room, in fact, any place where auxiliary seating is required. You know they will be there, just as sturdy as the day before, because CLARIN alone guarantees their chairs for ten years! Such a guarantee means many things. to you: lower cost over the years, less chance for accidents, and a good looking appearance that lasts on and on. CLARIN is the chair that stays new. Write today for free copy of our complete four-color catalog.

CLARIN MANUFACTURING CO.

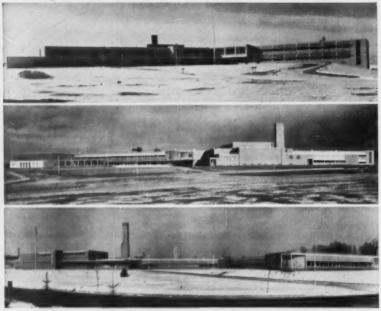
Illustrated is Clarin No. 2417-LL
... one of 65 individual models in the ently complete line of folding chairs. You'll find a Clarin chair just right for your purpose.

SETS NEW STANDARDS FOR SEATING

TEN YEAR GUARANTEE STAMPED IN STEEL

With complete confidence in the inherent quality of Clarin chairs, plus our 30 years of specialized product "linew how", we take gride in lessing an unrivolled 10-year Guarantee with every chair seld. The templete step of leop-term economy is the date stemped in one leg of each Clarin chair.

THREE MORE MODERN SCHOOLS by Architects, Bissell & Belair



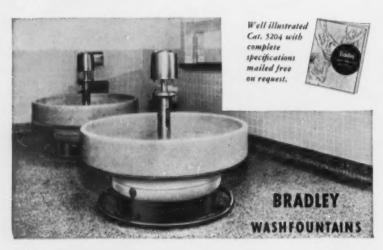
Top: Mounds View H.S., New Brighton, Minn. • Middle: Minnetonka H.S., Minneapolis.

Bottom: Alice Smith Elem. School, Hopkins, Minn. Architects for above schools, Bissell & Belair, Minneapolis

Equipped with Sanitary BRADLEY WASHFOUNTAINS

During the last 20 years particularly, school authorities and architects have recognized the vital need for adequate, economical and sanitary wash fixtures. Group type fixtures like Bradley Washfountains are providing such facilities with foot-control and self-flushing bowls.

With Bradleys, the danger of spreading infectious diseases is eliminated—there are no faucets and no used water collects in the bowl. No water waste either because supply is cut off immediately foot-ring is released. Bradleys serve more in less space,—help cut building and installation costs . . . For complete details write for Cat. 5204. BRADLEY WASHFOUNTAIN CO., 2233 W. Michigan St., Milwaukee 1, Wis.



SPOTLIGHT

power Commission, National Research Council, Scientific Manpower Commission and the Basic Physical Sciences Committee of the Alfred P. Sloan Foundation.

The following educators were also present: C. C. Dunsmoor, director, Board of Cooperative Educational Services, First Supervisory District, Westchester County; Howard V. Funk, superintendent of schools, Bronxville and Archibald B. Shaw, superintendent of schools, Scarsdale.

Chairman of the discussion was Maynard M. Boring, manager, Technical Personnel Division, General Electric Corporation and a director of the citizens committee.

Five Administrators Win Midwest Staff Position

CHICAGO—The first administrators to be prepared for leadership positions in educational administration at the Midwest Administration Center of the University of Chicago have been selected.

Five educators have been chosen from a group of 50 nominees from 21 states and Canada to fill staff associate positions for two years with the Center under its new program financed by the W. K. Kellogg Foundation.

Recipients of the awards and the positions formerly held by them are: Thomas R. Bowman, principal, Liberty Township Schools, LaFontaine, Ind.; Merton V. Campbell, supervising principal, Muscoda Public Schools, Muscoda, Wis.; E. H. Gilbert, coordinator of teacher education, State Department of Education, Oklahoma City; Roy A. Larmee, principal, Waterford Township High School, Pontiac, Mich., and Robert P. Moser, superintendent, Independent School District No. 1, Columbus, Wis.

The staff associates will participate in a continuing seminar at the University of Chicago designed to bring to them current thought and research findings in educational administration, sociology, psychology, economics, anthropology, and other

Hammond Organ goes to school



Growing trend in teaching

More schools than ever are offering organ courses, and most teach the popular Hammond. Students find its vast range of tones and tone combinations fascinating. Practice won't disturb other classes, for the Hammond Organ can be played whisper-soft, or used with earphones.



Makes gym work more fun

Teachers find the Hammond Organ a great help in making physical education more interesting, more fun. One of the best things about a Hammond is that it's easily moved from classroom to gym to auditorium. No installation, just plug in.

UPSTAIRS, DOWNSTAIRS, all through the school—the Hammond Organ contributes immensely to daily activities and special occasions such as assemblies, programs, athletic events and social gatherings. Any faculty member or student who plays the piano can quickly learn to play a Hammond.

The Hammond dealer in your community has a model to fit your needs, your budget. And prices begin at \$1,350 f.o.b. Chicago, for the Spinet. Visit or phone him soon for a complete demonstration of the Hammond Organ. No obligation.

HAMMOND ORGAN

MUSIC'S MOST GLORIOUS VOICE



Boon to school music groups

The Hammond Organ provides a beautiful background for choral groups. Widely used for band and orchestra work, too. Its remarkable versatility makes the Hammond suitable for music of any kind. And there's never any tuning expense, for a Hammond can't get out of tune!



FREE BOOKLET shows how your school can raise money for an organ

Mail coupon today for booklet called "49 Plans to Raise an Organ Fund." And ask your dealer about a free showing of Hammond's sound-color film "The Kind of Music You Want."

Hammond Otgan Company 4241 W. Diversey Ave., Chi Without cost or obligation, Also full details about Ham	cago 39, Illinois send "49 Plans to Raise an Organ Fund."
Name	
Address	
City	Zame State
Name of School	Your Title
	C) LETS, HAMMOND DESAN COMPANY

Dramatic **NEW** Teaching Aid...



OPAQUE PROJECTOR

Here's a simple way to project books, papers, coins, lab samples directly on a screen. An AO Opaque Projector, with the large 10" x 10" aperture, projects practically anything that's opaque, and not more than 3½" thick. Blows it up on a screen, large enough for whole audiences to see. People understand quicker, remember longer when they can see what you are talking about.

In Schools, Churches. Project test papers for comparison, news clippings, coins, gears. Show Bible Stories, pictures from books and other teaching materials.

In Business, Industry. Magnify products, papers, objects on screen so customers, salespeople, audiences of all kinds can see better, learn better, compare and inspect.



AO Educator 500

Your brightest buy for 2" x 2" slides and film strips. 500 watt — blower cooled — 3½", 5" or 7" projection lens.

Costs Little to Run. With an AO Opaque Projector there is no film to buy — no rentals to pay — no slides to make — the whole world provides your material.

Simple to Operate. Just flip a switch and insert copy. The AO Opaque focuses easily — keeps projected objects cool. Readily portable, 1000 watt lamp gives unmatched screen brilliance.

American Optical **®**

CHELSEA, MASSACHUSETTS

SPOTLIGHT_

related fields as they pertain to administration.

Francis S. Chase, director of the Center and chairman of the University's Department of Education, announced that the group will become acquainted also with the knowledge and experience gained through research undertaken by Cooperative Program in Educational Administration.

In the course of the seminar, considerable attention will be given to developing a general theory of administration.

Help conduct clinics

The staff associates will assist in conducting clinics held at the Center for faculty members of colleges and universities concerned with problems in the programs of preparation which their institutions offer in educational administration.

Similar clinics may be held for groups of school administrators faced with administrative problems.

The staff associates will also assist in conducting the conferences in administration held periodically by the Center.

Likewise, they will engage in research, the dissemination of research findings and individual programs of study which will permit them to complete the requirements for the Ph.D. degree.

Dr. Chase has announced that a total of approximately twelve to fifteen persons will serve as associates during the four-year period of the program. Another group will be selected in the spring to join the original associates in September, 1956.

Lawler Named MENC Exec. Sec'y at Chicago

CHICAGO—Vanett Lawler, associate executive secretary, Music Educators National Conference for more than 20 years, was appointed executive secretary of the organization by the MENC Board of Directors during the NEA convention in July.

Miss Lawler was music education consultant of the Pan American



with more safety features than ever! New 1956 Ford School Bus Safety Chassis

NEW tubeless tires for greater blowout protection...standard on all models.

NEW Lifeguard steering wheel has deep-center structure to cushion impact in event of accident.

NEW thicker brake linings give longer brake life.

NEW front axles have been increased in size for more strength and safety.

NEW stronger rear axles have greater capacity reserves, greater endurance.

NEW higher capacities . . . up to 2,000 lbs. more GVW to carry bigger pupil loads with ease.

NEW, more durable transmissions are Synchro-Silent type for easier shifting.

PLUS more horsepower per dollar than any other school bus line!

More than ever—in 1956—you'll save the day you buy—and you'll save every day of operation with a new Ford School Bus Safety Chassis. New power . . . up to 26% more horsepower, supplies extra power reserves for emergencies, hills and long hauls. Comparisons of net horsepower and suggested list prices show that Ford gives you more power for your money than any other line of school bus chassis!

For '56, Ford offers 5 safety chassis on 4 wheelbase lengths with capacities up to 66 passengers...5 Short Stroke engines, 4 Y-8's and a Six, from 133 h.p. to 175 h.p. More safety features than ever to meet or exceed the rigid safety standards set by the National Education Association. Read the whole story by sending in couponor call your Ford Dealer today.

FREE . . . CLIP HERE

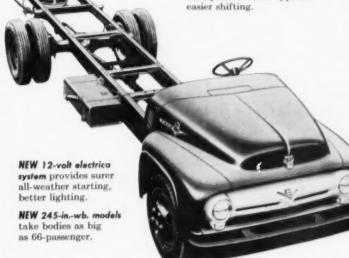
FORD Division of FORD MOTOR COMPANY P.O. Box B-3, Dearborn, Michigan

Please send me your latest news on the New Ford School Bus Safety Chassis for '56,

Name.

Address
City State

Check here if student



PIONEERS in LIGHT METAL PRODUCTS

ALUMINUM MAGNESIUM PLASTIC

SCHOOLROOM FURNITURE and SCHOOL SPECIALTIES

Folding Tables Desks - Tables Chart Racks Multi-Purpose Easel

Reversible Chalkboards Stur-D-Stac Chairs

Stur-D-Stac Cots

Stur-D-Stac Easels Stur-D-Stac Benches Stur-D-Stac Stools

Features: • Light Weight • Stacking • Modern Design Durability
 Low Cost
 No Maintenance

See your School Supply Distributor or write us.

products co. inc.

808 R ST. SACRAMENTO, CALIF.



PERFORMANCE OUTSTANDING!

As coaches rely on the performance of

each player to create a winning combination, so does Leavitt combine its many features to perfect the finest in telescoping bleachers. And Leavitt scores again with this masterpiece of engineering . . . designed to meet; the requirements of great versatility in the gym grea. Check feature for feature . . . you'll agree . . . Leavitt Telescoping Bleachers are the answer to your gym seating requirements.

DURABILITY

formation on the revolution-ary Leavitt Telescoping Bleacher in

Complete

For all your seating requirements, remember Leavitt for: Knackdown Portable Wood Bloochers • Portable Steel Grandstands • Add-A-Seet Perm Steel Stadiums • Compare Feature for Feature • Leavitt's ALWAYS the Bloocher.

WW bleacher Co.

208-220 GRIGGS ST., URBANA, ILL.

SPOTLIGHT

Union from 1941 to 1946, and in 1947 served as acting head of the Arts and Letters Section of UNESCO in Paris.

From 1949 to 1950, she was chief. Division of Education, Pan American Union, and is currently a member of the United States National Commission of UNESCO.

NAPSAE Given Department Status by NEA Assembly

WASHINGTON-The newest department in NEA is the National Association of Public School Adult Educators, granted department status by the NEA Representative Assembly at Chicago, July 6. NEA now has 30 departments.

New officers of the department are: R. J. Pulling, chief, Bureau of Adult Education, Albany, N. Y., president; Ralph Crow, director of adult education, Cleveland, vice-president, and Margaret Kielty, director of adult education, Fitchburg, Mass., secretary-treasurer.

Robert A. Luke, assistant director, NEA's Division of Adult Education Service since 1949, will also serve as executive secretary of the new department.

John H. Bigger, who is assistant executive secretary of the Adult Education Association, has the same post in NAPSAE.

European Schools Stress Intellect, Texas Prof Finds

Austin, Texas-The greatest difference a group of traveling Texas high school teachers observed while comparing European secondary schools to American is the European "detachment from the work of the world."

J. G. Umstattd, professor of secondary education and director of the project, declared that European secondary schools are "interested entirely in intellectual development.

"They have nothing to compare to our pupil activity programs, such as clubs, organized sports, dramatics



Pioneering School Planning Includes Pattern for QUIET Throughout

A milestone in school architecture, the Heathcote School of Scarsdale, N. Y., is a Citizens' Committee's dream come true: Little-schoolhouse atmosphere...ultramodern facilities...rare economy. Small wonder, with its advanced design, that the architects selected Acousticelotex Sound Conditioning for every classroom and corridor of this unusual school. The resulting quiet comfort promotes better hearing, better study habits for young minds...checks disturbing clatter in halls and rooms...helps both students and teachers to progress.

Low-Cost Answer—A sound-absorbing ceiling of Acousti-Celotex Tile keeps noise levels of conversation, traffic, routine schoolday activity at a minimum. At Heathcote, ceilings of Acousti-Celotex Tile bring near-

perfect acoustics to auditorium, gymnasium, shops, art rooms, library, to all study and play areas.

Easily Maintained—Acousti-Celotex Tile is quickly installed in existing buildings or during new construction, requires no special maintenance thereafter. Of high sound-absorption value, it presents a beautiful surface that can be washed repeatedly and painted repeatedly without impairing its sound-absorbing efficiency.

Mail Coupon Today for a Sound Conditioning Survey Chart that will bring you a free analysis of the noise and acoustical problems in your school, plus a free factual booklet, "Sound Conditioning for Schools and Colleges." There is no obligation.

Acousti-Celotex Sound Conditioning

Products for Every Sound Conditioning Problem — The Celotex Corporation, 120 S. LaSalle St., Chicago 3, Illinois. In Canada: Dominion Sound Equipments, Limited, Montreal, Quebec.

	MAIL NOW!
The Colotex Corpor	ration, Dept. D-105
120 S. LaSalie St., (Chicago 3, Illinois
	gation, please tend me the Acousti-
	ning for Schools and Colleges,"
let, "Sound Condition	ning for Schools and Colleges."



FOR THE PIRST TIME A "FIRST LINE"

PRICED FOR SCHOOLS AND STUDENTS











Perfect Combination for Better School Bands

CONN
ALTO SAX
IN CASE
INCLUDING
TAX

Yes, and Conn Director instruments are the answer to your "school budget prayers!" Here is a complete "first name" line of high quality, guaranteed, LOW PRICED band instruments that set a new standard of tonal perfection and ease of playing! Now you can approve the purchase of low price instruments with full assurance that your schools will have a "first line," if they specify CONN DIRECTOR. Your school purchasing director will be glad to know of this, too! Send for new Director catalog, today . . . it will be mailed FREE and without obligation!

BAND INSTRUMENT DIVISION C. G. Conn Ltd., Dept. 1097 Elkhart, Indiana



ING TAX BUT \$49950





WORLD'S LARGEST MANUFACTURER OF BAND INSTRUMENTS

\$11950

SPOTLIGHT_

and student activities."

In European secondary schools the students are segregated into schools by their ability, Dr. Umstattd pointed out.

"In the comprehensive American schools," he said, "our differences are taken care of under the same roof."

In England and Scotland, Dr. Umstattd said he detected a slight tendency on the part of the secondary schools to model themselves after the American system.

He did not find this so in other countries he visited.

Erie Tells Parents About Reading Readiness

ERIE, Pa.—Is Your Child Ready? is the title of a brochure published by the school district of this city to explain to parents the factors involved in reading readiness.

The title page bears the slogan "Home and School Share in Readiness," and the first inside page contains a letter to parents from John M. Hickey, superintendent of schools.

Dr. Hickey explains that "parents' cooperation is important," and urges them to continue reading to their children at home.

The rest of the brochure raises some questions under titles of physical, social and mental readiness, to help parents decide how their children are benefitting from the school experience.

American Assembly Publishes Books on Current Issues

NEW YORK—The American Assembly, a program of continuing conferences which bring together labor, business, farm groups, the professions, political parties and government to discuss issues of national importance, has printed several publications.

These cover subjects like inflation, economic security, the United Nations, Federal Government service, farm policy and problems of state government, discussed at conferences Here's the Key to Gym Problems! Showing area-use flexibility made possible by FoldeR-Way Partitions in gymnasium and auditorium installations fully automatic partitions

Did you know that you can quickly and automatically transform one gymnasium into two? Or that you can just as easily convert it to a large auditorium? You can . . . and just by turning a key . . . when you have R-W Fully Automatic FoldeR-Way Partitions!

Fully Automatic FoldeR-Way Partitions, designed and constructed to fit any size area, are electrically operated, opening and closing smoothly and silently at a turn of the switch key. Each partition section automatically locks firmly to the floor without bolts or tracks. Acoustically engineered and insulated sections are 3 inches thick to provide maximum "sound stifling effectiveness."

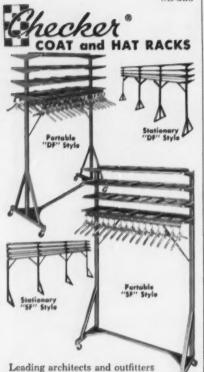
For greatest space flexibility, smooth and silent operation, and years of trouble-free performance, more and more architects and school boards are specifying R-W Fully Automatic FoldeR-Way Partitions. Write for Catalog A-99 and get complete details showing how FoldeR-Way can help solve your space problems.



SLIDING DOOR HANGERS & TRACK . FIRE DOORS & FIXTURES - GARAGE DOORS & EQUIPMENT - INDUSTRIAL CONVEYORS &



526 W. THIRD STREET, AURORA, ILLINOIS



specify Checker Wardrobe Equipment to save space and hold wraps in an efficient, sanitary and orderly manner. Hats rest on high ribbed, slotted shelves. Spaced hangers keep coats apart, open to light and air, visible and instantly available. SF Style units accommodate 4 or 5 persons per foot. DF style units ac-commodate 8 or 10. 3'2", 4'2" and 5'2" long "portable" units go wherever needed on large casters. "Stationary" units come on glides and can be anchored to floor. "WM Style racks mount directly on any wall. All Checker racks are correctly engineered to interlock on left or right and to stand up under a full load. They will not tip over, sag, sway, creak or wobble. Built for lifetime service of strongly welded heavy gauge steel and square tubing and beautifully finished in modern baked on colors. They are vermin-proof and fireproof.





- Add-on shelves spring lock either to right or left
- 3. Yags now go on honger hooks
- 4. Any Checker quickly converted from hanger to hook type of Write for Bulletin CK-51

VOGEL-PETERSON CO. 1127 W. 37th Street . Chicago 9, Ill.

SPOTLIGHT

on these topics at Arden House, Harriman, N. Y., home of the Assembly.

Individual copies of the publications are furnished without charge by Education Department, The American Assembly, Graduate School of Business, Columbia University, New York 27, with which the Assembly is associated.

U. S. Office Booklet Studies State Structure, Control

WASHINGTON-The structure and control of public education at the state level is the subject of a new publication issued recently by the U. S. Office of Education.

Titled The State and Education, the publication reports data for each state and the territories of Hawaii and Alaska.

Prepared by Fred F. Beach, chief, state school administration, and Robert F. Will, research assistant in the U. S. Office, the booklet is the result of work by many national and state leaders in educational administration.

"This study was undertaken to provide information for states faced with the task of reorganizing and revitalizing their administrative machinery for the improvement of public education," declares S. M. Brownell, commissioner of education.

"The report shows the results of efforts to extend public education to larger numbers of children and adults, and also to improve the quality of educational offerings, with renewed emphasis upon control of public education by the people in their own communities and states."

U. of Texas May Give **Technical Assistance to India**

Austin. Texas-If contracts between the government of India and the United States can be worked out, the University of Texas will furnish four technical assistants to act as advisors to the Indian Ministry of Education, reports L. D. Haskew,

SE-387

Towers of Strength...



 portable sectional permanent GRANDSTANDS **BLEACHERS**

The "tower type" construction on the Snyder all steel grandstand illustrated, insures long usage and safe seating.

Easy to install, designed so additional sections can be added, and planned for future installation of shower facilities this Snyder Steel Stand is safe, economical and practical.

If you are considering a similar installation or need help in planning, consult our engineers. They will gladly help you with your grandstand or bleacher problems.

For further information write:

SNYDER TANK CORP.

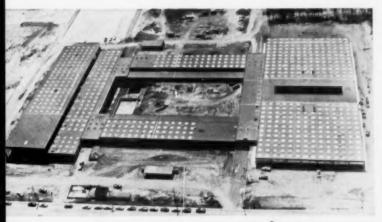
P. O. Box 14, Buffalo 5, N.Y. . P. O. Box 2390, Birmingham 1, Ala



A salute

The new Hillsdale High School, San Mateo, California, was planned by John Lyon Reid and Partners (architecture-engineering). Rothschild, Raffin & Weirick and Northern Constructors, General Contractors, Thomas F. Reynolds, Dist. Supt. of Schools.

to the school with America's newest, most modern daylighting system



An aerial view of the building during construction shows pattern of Toplite Panels.

Close-up photo of some of the 661 Toplite Panels in the Hillsdale School. This new Hillsdale High School, which is opening its doors this Fall, brings to architecture a bold new concept in school design.

Here is a school that will keep pace with changes in curriculum—changes in age groups and population. Portable walls allow large classrooms to be easily subdivided and small classrooms to be readily enlarged.

The key to this extreme flexibility is that each 14 by 14 foot area is self-sufficient as to its daylighting, heating, and ventilating. Because of this new and different utilization of floor space in the Hillsdale School, the traditional use of windows for lighting was ruled out. O-I Toplite Roof Panels were the answer.

There are 661 Toplite Panels in the Hillsdale High School Building—providing proper light for every classroom and for every part of the classroom at any time of the year. Although the Hillsdale project is the largest single use, up to now, of O-I Toplite Panels, they have been proved by architects and builders for other institutions, factories, and even for homes.

Free Booklet.

The complete story of this great new advance in efficient utilization of free daylight is available. Write: Kimble Glass Company, subsidiary of Owens-Illinois, Dept. SE-10, Toledo 1, Ohio.



TOPLITE ROOF PANELS

AN (1) PRODUCT

Owens-Illinois

GENERAL OFFICES • TOLEDO 1, OHIO



for Music Appreciation Record Sessions for Playbacks of Bramatic Class Performances for Improving Existing Sound Systems for Superior Sound with Silde, Strip Films for "Professional" College Radio Stations for Audio Work in Radio-TV Engineering Classes

For the first time-your school can enjoy the tremendous advantages of the PRESTO Pirouette turntable...which has created a sensation in the professional field.

A truly revolutionary mechanism, the Pirouette offers quality reproduction of sound...plus incredibly simple operation ...in a modestly priced turntable that fits easily into school budgets.

Feature for feature, the Pirouette proves its superiority! Compare—you'll see why this turntable is considered the crowning achievement of PRESTO — world's largest makers of precision recording equipment.

 Improves record performance immensely — gives your sound system professional quality.
 Has super-streamlined 3-speed shift—a simple sideway flick selects 33½, 45, 78 rpm.
 Revolutionary design—3 idler wheels mounted on single movable plate—insures trouble-free operation.

operation.

Famous quality features—extra heavy weight, wide bevel, cast aluminum 12" table, covered in non-slip cork.

Built to take hard knocks of school use—con-

structed by professionals from finest materials. Simple to install — only rectangular cut-out needed. Simple to incorporate into your pres-ent sound system. — enly \$53.50

PRESTO SR-27 TAPE RECORDER

Compare this superb tape recorder value with anything else on the market, SR-27 has PRESTO'S



s market, SM-2/ has PRESIO 5 famous 3-motor drive...sep-arate record, erase and play-back heads ... fast forward and rewind. No take-up clutch. No idler pulleys. Complete with A-920 amplir (preamp equalizer and watt amplifier) only \$485.

OTHER PRODUCTS

RECORDING CORPORATION, PARAMUS, NEW JERSEY

Conndian Division:

25 Warren St., New York 7, N. Y. Instantaneous Recording Service, 42 Lombard St., Toronto

WORLD'S LARGEST MANUFACTURERS OF PRECISION RECORDING EQUIPMENT AND DISCS

SE-390 EASY TO MOVE . SET-UP . STORE

FOR ANY SIZE BAND, ORCHESTRA or CHORUS

Custom-built to fit your band, orchestra, or chorus. Sturdy. Safe. Guaranteed. Set up fast . . . take down quickly . . . store compactly. Also combination risers and portable stages for any event or performance. New 1954-55 catalog illustrates many types of risers, portable stages, sousaphone chairs, variety shows, and other items.

Wenger . . . top name in risers!

Write for FREE Cata log and low prices. FREE layout given promptly.

GET MUSIC EQUIPMENT CO.

20 Wenger Bldg. . Owatonna, Minnesota RISERS . PORTABLE STAGES . SOUSAPHONE CHAIRS

SPOTLIGHT

University vice-president.

Dr. Haskew, who is also College of Education dean, declares that these assistants will be the purchasing agents for supplies and equipment needed in India's secondary schools.

He just returned from a threeweek visit to India where he explored the possibility of the University giving such assistance to that nation's rapidly expanding secondary school system.

India is desperately revamping its secondary educational system to produce the leaders it will need for the next 20 to 40 years, Dr. Haskew explained.

"The world is turning on a pivot which is located in India, and the type of leaders she produces will make a tremendous difference in world affairs," he said.

Indian people, who for centuries waited for "answers from the top," are now aware that they need better trained people in their secondary schools to prepare students for future leadership in civic, religious, industrial, agricultural, political and educational endeavors. Dr. Haskew pointed out.

The Indian government has recently tripled its appropriations for secondary schools in a move which Dr. Haskew termed "courageous."

Their hope is to train people who can take care of their problems at the grass-roots level.

Back to School Night Becomes Forum for Parents

NORTH HALEDON, N. J.-In this urban Passaic county community. Back to School Night has evolved to the status of a forum in which local parents can observe and discuss teaching and learning techniques in the basic skills of the school program, reports Memorial School Principal Harold L. Ritchie.

Many PTA's in the northeastern United States hold annual Back to School Nights. North Haledon par-



See how much a MATICO floor saves you on maintenance alone!



... and that's only one advantage of long-lasting MATICO asphalt tile.

From the moment of purchase, a MATICO asphalt tile floor offers you important savings.

Savings on price . . . because it's the most economical type of luxury flooring available.

Savings on installation . . . because quality-controlled MATICO lays in easily, cuts labor costs appreciably.

And savings, of course, on maintenance. MATICO's smooth, non-porous surface sheds dirt easily . . . needs cleaning and waxing less often.

Write Dept. 15-10 today for full details and color chart.

MASTIC THE CORPORATION OF AMERICA

Mfrs. of: Confetti • Aristoflex • Parquetry • Maticork • Asphalt Tile Rubber Tile • Vinyl Tile • Cork Tile • Plastic Wall Tile

HOUSTON, TEX. . JOLIET, ILL. . LONG BEACH, CALIF. . NEWBURGH, N.Y.

And, over a span of years, vital savings in replacement. MATICO is exceedingly durable . . . stands up better and longer under the heaviest traffic conditions.

Choose from 29 rich, clear colors . . . an unlimited variety of designs and patterns . . . all calculated to make drab rooms and corridors brighter and more cheerful. Hundreds of modern schools across the land have made . . . and are making . . . this choice year after year.



SPOTLIGHT_

ents felt this offered an opportunity to help them better understand how and what their children are learning, Mr. Ritchie explains.

A request was made through the PTA executive committee that a Back to School Night be held in March. A program devoted to some phase of arithmetic was suggested.

250 parents attended

Approximately 250 parents turned out on a dreary, rain drenched, cold night to witness the program. The principal received a well-polished apple from an ex-teacher from Bridgeport, Conn. and a generous "needling" from the mayor who was called upon to go to the blackboard and write the definition and syllabic breakdown of the word "fraction."

When the bell rang for re-assembly and refreshments, reaction ran high in favor of this type of program, Principal Ritchie reports. A sample questionnaire testing parent reaction found that parents considered this program highly worthwhile.

Telephone reaction the following day ran in the same vein. Faculty members cited the program as a constructive step toward the further cementing of home-school relations.

Suggestions made by the parents on the questionnaire ran the gamut of requests for the same type of class demonstration with children, to congratulations on a show of courage, according to Mr. Ritchie.

Library Club to Encourage Students to Read More

NEW YORK—A new plan, which will offer badges, pins and certificates to encourage local students to read more books, has been developed here.

The plan will begin in October in three Lower East Side schools, with nation-wide coverage expected by next spring.

Called the Library Club of Ameri-

ARE LEADERS

ca, Inc., the non-profit group is sponsored by school officials with the cooperation of the Book Manufacturers' Institute.

It will seek to increase reading among eight- and fourteen-year-olds, and will be started in Public Schools 63, 177 and 188. About 92 classes with an average of about 30 to a class will be included.

Children of this age group tend to conform to patterns. The aim will be to make book reading so attractive and rewarding that readers and non-readers alike will enjoy books more, according to Sidney Satenstein, chairman of the Book Industry Committee of the Book Manufacturers' Institute.

The schools include students of mixed nationalities and social and economic background, he said.

Any student who reads four books of the prescribed list will be awarded a pin with the legend "Library Club of New York" and the club's motto "Readers are Leaders."

This group will also receive a certificate signed by the principal and teacher stating that the student has read four books and is entitled to wear a pin and to membership in the Library Club.

If the student reads six additional books he then becomes an Honor Member, and receives another certificate and a goldplated badge.

If he then reads eight more books he becomes a Life Member upon signing a pledge to read not less than two books a month thereafter.

He also becomes eligible to serve on a Library Advisory Council of his school which will meet monthly to discuss library uses and books.

Any class with 75 percent or more membership will receive an attractive banner to hang on the wall with the same legend "Library Club of New York—Readers are Leaders."



FLEETWOOD FURNITURE CO., GRAND HAVEN, MICHIGAN



of these HUNTINGTON Products in Schools, Hospitals, Churches

Modern teaching methods . . . group activities . . . therapeutic training . . . often require that children sit or lie on the floor. It can be wholesome and healthful if those floors are warm and clean.

New heating systems provide the warmth and eliminate drafts, but only you, with regular, thorough maintenance, can be sure the floors are as clean as they ought to be. Cleaning products have progressed with the times. We have the cleaners and waxes necessary to keep your floors clean, attractive and safe . . . and our "know how" in maintenance methods can be yours for the asking. If your cleaning program needs to be modernized to fit your teaching methods, write us for help.

FLOOR-SAN & Universal Cleaner

K®RI⇒X® Germicidal Cleaner

SIPAL Concentrated Detergent

NEG-SHINE® Concentrated Wax

COSMOLITE Anti-Slip Wax

HUNTOLENE & Antiseptic Floor Maintainer

HUNTINGTON



LABORATORIES

HUNTINGTON, INDIANA

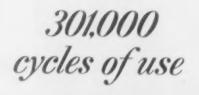
PHILADELPHIA 35, PA.

TORONTO 2, ONTARIO

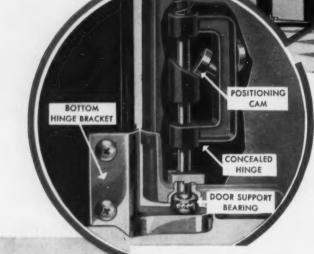
No. 4 OF A SERIES

WHAT TO LOOK FOR IN QUALITY TOILET COMPARTMENT CONSTRUCTION

One of many major differences that give you your money's worth in satisfactory service!



WITHOUT NOTICEABLE WEAR



THE SANYMETAL 7700 HINGE Is an adjustable controlled-action hinge which supports the door wholly on a thrust ball-bearing. The hinge is concealed within the door thickness—tamper-proof and dirt-proof. The position control is a separate spring-loaded ball-bearing roller and cam, supporting no weight. Constructed thus the door does not rise or lower as it swings. Anti-friction bearings make motion easy, and bearings are of "Oilite" and graphite types, requiring no lubrication.

LABORATORY CERTIFIED: To test the Sanymetal 7700 Hinge, an independent nationally known laboratory mounted a Sanymetal door from stock in the usual way using a Sanymetal 7700 Hinge taken from stock at random. After the test, the laboratory checked the positioning, motion and alignment of the door, then disassembled and inspected the hinge parts, and reported "all working parts in satisfactory condition."

This long-life feature is STANDARD at no extra cost on all types of Sanymetal Compartments. Many quality construction features found in all Sanymetal Toilet Compartments mean longer satisfactory service. These features result from Sanymetal's 41 years' experience manufacturing compartments. Be sure you get this quality.

A feature to look for is the Sanymetal 7700 Bottom Hinge on compartment doors. Notice that it is concealed within the normal thickness of the door, having no cumbersome exposed hinge mechanism. Thus it produces clean, architectural door lines. It is a longer lasting, easier working, more reliable hinge. In independent laboratory test this hinge, mounted in a door, was opened and closed 301,000 times. After this test the door still operated perfectly and the hinge showed no noticeable wear!

This hinge, contributing to long satisfactory service, is one of many special features standard at no extra cost on all Sanymetal Compartments. Ask your Sanymetal Representative about all these features not offered by others.

See Sweet's or send for Catalog 92, describing all Sanymetal Compartments. If you wish, we will mail other advertisements of this series on quality construction details.



CONFERENCES

on education

ARIZONA

Held April 25-26. Regional conferences being held, with second state conference October 17-18.

ARKANSAS

Tentatively planned for week of October 15.

CALIFORNIA

To be held September 30-October 1.

COLORADO

Regional meetings held before April 30; statewide conference held September 12-13.

CONNECTICUT

Held Nov. 30-Dec. 1; six regional conferences in April and May, second state conference in December.

DELAWARE

To be held October 8.

FLORIDA

Held September 28-29.

GEORGIA

Held in September.

IDAHO

Held September 26-27.

ILLINOIS

Held September 30-October 1.

INDIANA

Scheduled for October 24.

IOWA

Held December 9-10; second state conference on October, 30.

KANSAS

Held December 9; a second state conference in the fall.

KENTUCKY

Held September 21-22.

LOUISIANA

To be held last week of October.

MAINE

Six regional meetings in September and October after conference of school superintendents; no s'atewide conference.

MARYLAND

Held June 24-25.

MASSACHUSETTS

Held September 8-10.

MICHIGAN

Held May 18.

October, 1955



UNIQUE Weldwood Chalkboard attracts magnets, doubling as bulletin board and visual aid board. Weldwood Aluminum Chalkboard Trim is easy to apply, low in cost. Rochambeau School, White Plains, N. Y. Inst. Kalflex, Inc., New York City, Arch. Shirley & DeShaw.

New kind of chalkboard is easy on young eyes, easy on school budgets



BUILT-IN lockers of beautiful Weldwood natural birch encourage neatness and order. South School, New Canaan, Conn. Architect: Sherwood, Mills and Smith.

And it's guaranteed for the life of the school!

You're looking at a completely new idea in Chalkboard for schools-yet one that's been proved in hundreds of installations. It's Weldwood Chalkboard - a porcelain-faced steel* sheet bonded to strong, rigid plywood that is backed with a sheet of aluminum for balanced construction. Chalk glides easily and noiselessly over its velvety surface. Its glare-free green color makes reading easyand it never requires refinishing. Installed cost is usually less than for ordinary chalkboard; maintenance expense is nil. It offers a wide range of advantages for commercial and industrial uses too. Like to know more? Ask your architect (he'll find all specifications in Sweet's Files), or send coupon for details. *Porcelain faces by The Bettinger Corp

Weldwood[®] Chalkboard

product of

United States Plywood Corporation
World's Largest Plywood Organization

United St Weldwoo	ates Ply ad Bldg.,	wood 55 W	Corpo est 44t	ration h St., N. Y.	36, N. Y.	4
	send me	a free	folder	on Welds		
NAME						
ADDRESS.						
CITY					TATE	

MINNESOTA Held May 23-24.

MISSISSIPPI To be held around October 1.

MISSOURI Held August 22.

MONTANA To be held October 7-8.

NEBRASKA Held Nov. 22; follow-up conference

NEVADA Tentatively planned for November.

NEW HAMPSHIRE Held June 6.

NEW JERSEY Held May 20-21.

NEW MEXICO Held July 11.

NEW YORK

NORTH CAROLINA Tentatively planned for October.

NORTH DAKOTA To be held October 3-4.

Two state conferences, July 20-21 and October.

OKLAHOMA To be held October 18.

ORECON Held June 15-16.

PENNSYLVANIA Held April 14-15.

RHODE ISLAND To be held November 2.

SOUTH CAROLINA To be held between October 1 and 15.

SOUTH DAKOTA Held July 13-14.

TENNESSEE To be held September 13-14.

To be held October 31-November 1.

UTAH To be held about October 10.

VERMONT Held September 16-17.

VIRGINIA Held August 31-September 2.

WASHINGTON Held Nov. 22-23, 1954.

WEST VIRGINIA Held September 22-23.

WISCONSIN Held June 27-28.

Held Nov. 19-20, 1954; follow-up meetings planned for December.

DISTRICT OF COLUMBIA Held May 26.

ALASKA Planned for October 19.

HAWAII Held June 29-30-July 1.

PUERTO RICO Held in September.

DIVISION

VIRGIN ISLANDS To be held in October or November.



BUY LIGHTING -NOT FIXTURES-INVEST IN AMERICA'S FINEST FLUORESCENT LIGHTING





If you are planning a building expansion or — any program requiring funds — there will never be a better time than right now to discuss your money raising problems with a qualified fund-raising firm.

With 42 years experience and more than 3,300 satisfied clients, the American City Bureau is "qualified" to aid you to prepare for fund-raising — to survey your situation and, to direct your campaign in a manner that brings success and good will to your efforts.

Ask us about the advantages and low cost of professional direction for your fund-raising program.



FUND-RAISING

PUBLIC RELATIONS

221 North LaSalle St. Chicago 1, Illinois 470 Fourth Avenue New York 16, N.Y.

Charter Member American Association of Fund-Raising Counsel

\$109 million for education

The major federal appropriations for educational programs granted by the first session of the 84th Congress totaled nearly \$109 million, exclusive of funds for veterans education and for general research and development.

This in itself is a record of some kind, since only a little more than \$99 million were requested for these educational purposes in the President's budget. Most of the educational ledger is still in red ink, but a careful roundup shows that the early actions of the second session may shift the record to the credit side.

Although the Senate moved faster than the House of Representatives toward school construction legislation, the House, breaking a precedent of many years, moved farther, reporting out a bill which came just too late for consideration in the competition of the last minute rush before adjournment. (See September, page 86).

Advocates of measures in both bodies of Congress are poised for action when the first roll call of the second session is held in January. With the Wainright (R.-N.Y.) antisegregation amendment eliminated, and the failure of the proposal that schoolhouses erected under the terms of the reconstruction bills be paid for at wage rates specified by previous acts, there is more room than usual for optimism.

The college housing loans, provided for in Public Law 345, were liberalized to permit funds to be expended for dining halls, cafeterias, student unions, or other buildings closely related to dwelling facilities. The college loan fund itself was raised to \$500 million of which \$100 million is available for buildings needed for the auxiliary services.

Attention continues on the part of government with regard to assisting federally-affected areas. The Public Law which authorizes payments to local school districts for maintenance and operation of the schools in such areas, due to expire mid-year 1956, has been amended to extend aid to 1957. The action was taken to enable districts benefiting from the measure to plan their programs well in advance of the expiration date.

Channels for education

Educational television occupies a more prominent position on the capital scene than usual. The Joint Committee on Educational Television is pushing its case before the Federal Communications Commission to protest the appeal of a commercial organization in Des Moines for a permit to telecast on an education channel assignment there. Meanwhile, proposals have been advanced for a reorganization of efforts to hold fast the 258 educational television channels now restricted for education.

Reasons advanced for the reorganization are overlapping purposes and activities. Some of these are recognized, as various groups join the Joint Committee on Educational Television in urging use of the channels which the hearings, held under the auspices of JCET, originally made available for educational use.

The nub of the present proposal is that the Joint Committee become a "Joint Council" which would include representation for most of those now interested in some phase of educational television. The new group, if organized, would have a unified office located in Washington. The reorganization would not be effected without much argument, since each educational area now represented will struggle for influence as strong as that which it now enjoys.

Honoring Miss Hennock

Frieda B. Hennock, who recently resigned as a member of the Federal Communications Commission, was praised at a dinner held in her honor and attended by nearly 500 leaders in government, broadcasting and education. Presiding was Senator Estes Kefauver from the Davy Crockett state.

Principal point of speeches made, including that of the retiring commissioner, was the maintenance of the 258 educational television channels "with no time limitations whatsoever."

Building needs high

Efforts are still being made to unravel the confusion which arose from the testimony of former Secretary of Health, Education, and Welfare Oveta Culp Hobby before the House Committee on Education and Labor regarding the prospective classroom deficit for the school year 1959-60.

The gist of her testimony was that, by the date named, there would be a deficit of 176,000 classrooms rather than the previously estimated 407,000.

The new estimate was based on the confidence of the Secretary that 300,000 schools would be built before 1959-60.

The Architectural Record has just completed its own study of school building needs based upon estimates from chief state school officers. The report of that study indicates that, three to one, these officers felt that there had been no reduction in classroom needs brought about by enrollment increases and replacement requirements.

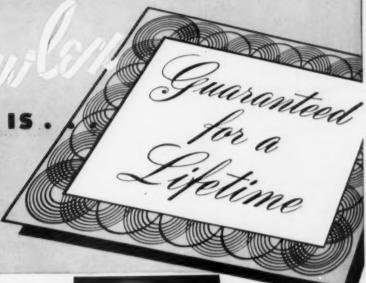
One-fourth of the replying school officials said that the needs have in fact increased.

The Record's survey shows that the needs are much greater in metropolitan areas, or fringe areas close to them. Also, according to the study, "the picture reflects population shifts from central to western states."

No matter which you use...

PROJECTOR IS

Many projectors LOOK somewhat alike, in appearance and price—but Viewlex has something extral Rigidly controlled standards of QUALITY carried through every step of manufacturing assure projectors that are trouble free and a delight in operation. VIEWLEX QUALITY CONTROL is a precious property—it is the real reason why Viewlex guarantees every Viewlex projector for a lifetime!





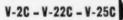
VIEWLEX VIEWTALK

Plays: standard and longplaying records, up to 16" — two permanent needles on twist arm. 33½, 45, or 78 r.p.m. Model WR— 4" x 6" detachable speaker for 150 or 300-watt Viewlex projectors. Model WHD— 6" x 9" detachable speaker for 500-watt projector.



VIEWTAPE

Hi-Fi sound and picture. Easy to record. Easy to edit. Fast wind and rewind. I full hour an every 5" reel. Perfect for schools, churches and industry. Accommodates any Viewlex Projector.



For 35mm filmstrip single and double frame, vertical and horizontal pictures, 2 x 2 and Bantem slides, any type mount. Change from filmstrip to slides in seconds. V2C—150-watt, V-22C—300-watt motor fan cooled. V-25C—500-watt motor fan cooled. 3-5-7-9-11 inch lenses.



V-45 - V-445

For single-frame filmstrip. The ideal budget-priced filmstrip projector. Clear, sharp projection: brilliant illumination; simple to operate. Cannot tear film. Model V-45 150-watt convection cooled. Model V-45 300-watt motor fan cooled. 2", 3", 5" and 7" focalength lenses available.



OF

VIEWMATIC

Remotely controlled and automatic magazine fed slides, projection of 2 x 2 slides, Holds 30 slides, changed by remote control push-button or automatic timer. Runs forward or backward at any speed. For teachers, lecturers, sales and advertising promotions.



STRIP-O-MATIC

Remote control 35mm filmstrip advance mechanism. Hand-held push-button. Allows complete freedom of movement. Speaker can stand wherever he wishes, or even sit with the audience. For use with all Viewlex filmstrip projectors (Illustrated here with V-25C).

Write Dept. S-5 for literature and the name of your nearest franchised Viewlex Dealer.

"Change-O-Matic" Automatic slide changer accommodates paper, glass, metal, or tape slides intermixed.

Viewlekine.

35-01 QUEENS BOULEVARD LONG ISLAND CITY 1, N. Y.

recent publications the school administrator will want to read, to pass along to associates, or "to have heard of"

The Juvenile in Delinquent Society

By Milton L. Barron, Alfred A. Knopf, New York, 1954, 349 pp. 85.00.

The underlying causes of delinquency in America are viewed as being rooted in our social structure.

Competition, attaining success, accumulating wealth, and similar national characteristics are discussed as provoling wrong-doing. The solution of the problem requires basic changes in our culture, rather than panaceas.

Drawing on theory and research from several fields in addition to sociology, the author deals with the scope and causes of delinquency as well as the reactions of society to it.

The book is written primarily as a text for courses on criminology and juvenile delinquency.

Education and Anthropology

Edited by George D. Spindler, Stanford University Press, Stanford, California, 1955, 302 pp., \$5.50.

This book consists of thirteen papers read at a conference at Stanford University in 1954, and a verbatim report of the discussion of these papers.

The chief justification for the conference is in these observations made by Education Professor I. James Quillen in the introductory address:

(1) Education, in the broad sense, is a process through which a culture perpetuates itself; (2) 'fhe school is one important educative institution, and to understand its function and role educationists must have a clear concept of the meaning of culture; and (3) Anthropologists are the students of acculturation and socialization, and their knowledge and procedures of inquiry can be of great help to school people.

To make clearer the contribution anthropology might make to education, these topics were then developed formally by anthropologists and subsequently discussed, generally by educationists: "Models for Analysis of the Educative Process in American Communities," "The School in the Context of the Community," "The Method of Natural History and Education Research," "Some Notions on Learning Intercultural Understandings," "Contrasts Between Pre-Pubertal and Post-Pubertal Education," "Discrepancies in the Teaching of American Culture," "Culture, Education and Communication Theory," and "The Meaning of Education and Anthropological Theory."

This reviewer has learned to expect lucid and significant writing from anthopologists and his expectations were not violated in this collection of papers.

> —Stephen M. Corey Dean, Teachers College Columbia University New York

Supervising Instruction In Secondary Schools

By Robert C. Hammock and Ralph S. Owings, McGraw-Hill Book Company, 1955, 316 pp., \$4.75.

A fine basic text on supervision stresses special problems of secondary school supervision.

Professor Hammock teaches at the University of Alabama; Professor Owings, at Mississippi Southern College.

The Finance of Higher Education

By John Dale Russell, The University of Chicago Press, 1954, 416 pp., \$7.50.

With this revision, a respected and popular book on the financing of higher education is brought up to date.

The author, at present chancellor and executive secretary of the board of educational finance for New Mexico, summarizes research and suggests experience-based solutions to problems of college business and financial management.

Educational Psychology

Edited by Arthur P. Coladarci, The Dryden Press, New York, 1955, 556 pp., \$3.90.

Forty-six articles on educational psychology are selected from periodical literature and offered with minor abridgements.

Good "arbitrary" selection of articles and a good chart correlating them with respected textbooks in the field enhance the value of this book of readings.

Unit Teaching in the Elementary School

By Lavone A. Hanna, Gladys L. Potter, and Neva Hagaman, Rine-hart and Company, New York, 1955, 592 pp., \$5.50.

The philosophy and practice of unit teaching are ably discussed.

A unit of work is depicted as the ideal framework by which teachers can offer, simultaneously, learning experience to meet all phases of children's growth needs.

The text contains a wealth of practical suggestions on planning and developing units.

Organization and Administration of Guidance Services

By Edward C. Reeber, Glenn E. Smith, and Clifford E. Erickson, McGraw-Hill Book Company, New York, 1955, 294 pp., \$4.75.

This authoritative and comprehensive textbook was revised from the 1947 edition to include and orient changes and growth in the guidance field in recent years.

The basic guidance services are discussed; organizational and personnel problems are considered.





WANTED:

Dictaphone TIME-MASTER-trained secretaries!

There's one thing your students want from their schooling: a chance at the best jobs with top pay.

That's what they're prepared for if you teach them to transcribe Dictaphone TIME-MASTER dictating machine dictation.

You see, more and more forward-looking corporations are discovering that with the world's number-one dictating machine, every-body gets more done more easily—secretaries and bosses. In fact, transcription with the

Dictaphone transcribing machine has become one of the basic secretarial skills.

By including the Dictaphone Business Practice Course in your curriculum, you help students earn the Certificate of Proficiency in Dictaphone TIME-MASTER transcription.

Dictaphone's School Rental-at-Cost Plan makes the best equipment available to you—at the smallest possible cost. Included in the rental is a complete set of *Dictabelt* practice records plus other educational accessories.



Send for full details. Write Dictaphone Corp., Educational Division, Dept. SE-105, 420 Lexington Ave., N. Y. 17, N. Y.

CORPORATION

The words Dictaphone, Time-Master and Dictabelt are registered trade-marks of Dictaphone Corporation.



RIGHT WAY

BAKER SCAFFOLDS get your men right up to the correct working height, even the high spots and hard-to-get-at places. Ample platforms; adjustable every 3 inches. Always level, even on stairways. Ball-bearing, rubber-wheel casters. No X-bracing; spans occupied areas. Get the facts about Baker Scaffolds.

Listed under Reexamination Service Underwriters' Laboratories, Inc. Distributors in Principal Cities



Write for Bulletin 551

	ease send me full details and Baker Scaffolds in action
without obliga	ation.
Numa	
School	
Address	

LIBRARY

OTHER PUBLICATIONS AND PAMPHLETS

The editors have selected the publications listed below as worthy of the administrator's attention. Those of particular value appear in heavy type.

Instructional Program

Box Score on the UN: 1945-55, by the NEA Committee on International Relations, is a chart of major United Nations action, NEA.1 Price: 10¢.

The Learning Process, another in the What Research Says to the Teacher series, presents questions and answers about learning which have proved helpful to many teachers. NEA.1 Price: 25¢.

Criteria for Driver Education, by NEA National Commission on Safety Education, sets criteria for minimum time standards, teacher selection and preparation, instructional materials, and other characteristics of the driver program. Free to schools. NEA.1

Flyer Listing Publications Issued by NEA Department of Classroom Teachers, acquaints classroom teachers with the many materials, free or inexpensive, available to them from their national department. NEA.1

Choosing Free Materials for Use in the Schools, American Association of School Administrators, special pamphlet. A practical guide to help school administrators select and make use of the rising flood of free materials. NEA.1 Price: 50¢.

Vocational education

Vocational Education in Distributive Occupations covers organization and operation of local programs. Vocational Division Bulletin No. 255.

¹Pamphlets published by National Education Asso-ciation departments may be obtained by writing to 1201 Sixteenth St., N. W., Washington 6, D. C.

NEWI Revauer' Monel Self-Locking bibb screw -10 sizes do



NEWI 'Sexauer' Easy-Tite reinforcing

This nylon plug locks the screw automatically!

NEW! Amazing, patented screw and washer combination cuts faucet washer replacements 75%

— with each leak eliminated, you reduce water and fuel bills up to \$28.80 quarterly

Most faucet washer failures are caused by wrong length screws. 'Sexauer' Self-Locking screws* and Easy-Tite washers* - used together - cut costly washer re-placements 75%! You save up to \$28.80 quarterly in water and fuel alone with each leak stopped. Here's how .

A screw too short for the tapping distorts and splits the washer when tightened; the washer works loose, is torn to shreds. If too long, it can't grip the washer; this ruins the washer and causes hammering in the water line.

Simplifies fitting problem—cuts installation costs



NYLON PLUS 'Sexauer' Self - Locking screws eliminate the problem of misfit screws. They lock automatically at the required depth as the nylon

plug is compressed in the faucet thread. The washer is not distorted, is held firmly. You can re-use Self-Locking bibb screws

repeatedly. Made of Monel, they resist corrosion, never rust; heads won't twist off, screw driver will not distort the slot.

Self-Locking screws save time spent in fitting the proper length-10 sizes do the work of 37! Used with new, Fiber-glas-reinforced 'Sexauer' Easy-Tites, they cut washer replacements 75%, fixtures last longer. Easy-Tites resist closing squeeze and excessively hot water, outlast ordinary washers 6 to 1!

Water and fuel savings

One dripping faucet wastes 8,000 gals. of water yearly. A pinhole size stream increases waste to 8,000 gals. in a single month! Here is what you save quarterly in stopping just one pinhole leak on a hot water faucet:

Fuel Saving		Water	Saving	Total	Saving
08 (198 gals.) Coal (2,469 lbs.) Cas (21,103 cu. ft.)	\$22,77 22,22 21,20		03 03 03	21	8,80 8,25 7,23

Save water, fuel and labor costs: conserve costly fixtures by cutting washer replacements 75%! Use new 'Sexauer' Self-Locking screws and Easy-Tite faucet washers. You save every time you do!

WRITE FOR CATALOG. New 'Sexauer' Self - Locking screws and Easy-Tite washers are just part of the line of over 3,000 'Sexauer' Triple-Wear plumbing repair parts and patented precision tools. Send for our new, 126-page Catalog H. Write today!



J. A. SEXAUER MANUFACTURING CO., INC. Dept. X-105 2503-05 Third Avenue, New York 51, N. Y.

S LEADING SPECIALISTS IN



How to "Make Yourself HEARD"!

-without KILLING your voice.

AUDD

HAILER

PORTABLE • SELF-CONTAINED ELECTRONIC MEGAPHONE

Now you can speak to individuals or groups... UP TO HALF-A-MILE AWAY... clearly, instantly — without straining your voice. Audio Hailer operates on DRY batteries, and weighs only 5½ lbs. complete. Yet it contains a genuine vacuum-tube amplifier that multiplies your voice 1000 times! Write for brochure that tells how other colleges and schools use Hailer.

band directors, athletic coaches, cheer leaders—fire drills, playground work, and as a flexible P. A. system.

Audio Hailer is of tremendous value for Band work, Marching practice, football, playground work, fire drills, etc.

HARRY C. J. LENNOX Supt. of Schools Seligman, Arizona

> It's TERRIFICI Usually about this time of year, I talk in a whisper. With Audia Hailer, I correct our mistakes with minimum effort, and my voice is still very "untired."

ADAIR HILLIGOSS, Music Supervisor Senior High School Sandpoint, Idaho Just clip to your School Letterhead:

AUDIO EQUIPMENT CO., INC.

805 MIDDLE NECK ROAD, GREAT NECK, L. I., N. Y.

Please send Audio Hailer brochure to the personal attention of

Name

Title.

New! Decorator styled LOCKERS by Equipto



EYE-PLEASING FEATURES GALORE!

Graceful Lines. Doors have rolled edges top and bottom. Recessed louvers are of trim modern design.

Distinctive Colors. Furnished standard in handsome grey baked enamel finish. Wide range of colors available at just 5% extra cost.

Smooth Snog-Proof Interior. No sharp projections to tear clothing or scratch skin.

Recessed Handle. No protruding parts. Operates 4-point latch mechanism at finger touch.

No Nuts or Bolts Anywhere. Lockers are assembled 6 times faster and far stronger by channel locking construction. There are no dinky parts to come loose or fall off.

Spirits soar at the sight of these smart, streamlined Modern-Flow Lockers! School halls take on new life and attractiveness. And the beauty is there to enjoy day-after-day. Picture their pleasing effect on students, parents, and faculty. Remember, they are tank-strong, pilfer-proof, and will withstand roughest usage over an extra long service life. Available in single, double, and multiple tier types in all standard sizes. Write today for fully illustrated free booklet "HOW TO SOLVE YOUR CLOTHES STORAGE PROBLEM."



DIVISION OF AURORA EQUIPMENT CO.

612 Prairie Avenue, Aurora, Illinois

Steel Shelving . . . Parts Bins . . . Drawer Units

LIBRARY.

Distributive Education Series No. 19, Office of Education. Price: 15¢.

School and Community

Explorations in Parent-School Relations studies the subject at Casis School in Austin. University of Texas Press, Austin 12. Price: \$2.00.

It's High Time is a guide for parents of high school students, telling how to understand teenagers, one-self, and how to work together.

NEA. Price: 50¢.

63 Tested Practices in School-Community Relations is a manual to help administrators secure maximum participation by citizens in the school program. Metropolitan School Study Council, 525 W. 120 St., New York 27. Price: \$1.50.

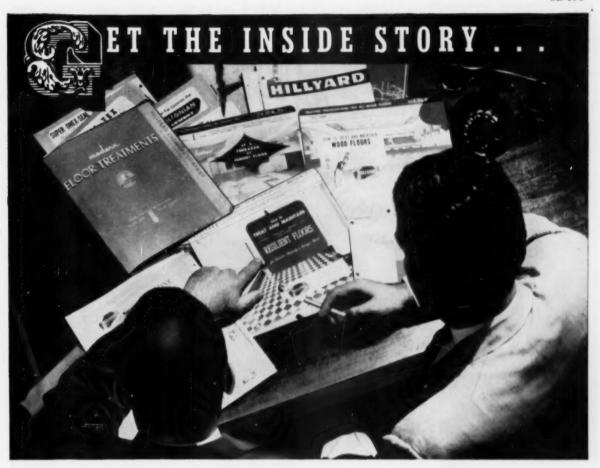
What Faces Ohio's Public Schools? is a brief digest of the report of the Ohio School Survey Committee on instructional program, personnel and teacher education, state organization, local district organization, housing and transportation and finance. Ohio School Survey Committee, Room 6, House of Representatives, Columbus, Ohio.

Life-Long Learning is a wellillustrated report of the adult education program of the Des Moines Public Schools. Department of Adult Education, Des Moines Public Schools, Des Moines, Iowa.

Education in Erie—1950-1960 is a report by the superintendent of schools. John M. Hickey, Superintendent of Schools, Public Library Bldg., 7th and French Sts., Erie, Pa.

^{10%}ce of Education publications are available through the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

³Pamphlets published by National Education Association departments may be obtained by writing to 1201 Sixteenth St., N. W., Washington 6, D. C.



and get the best Floor Treatment and Maintenance Program that's within your budget

—how to bring your floors into peak condition and keep them that way. Finest quality Hillyard Products cut labor time—and assure actual savings of maintenance dollars!

A Hillyard Floor Survey is made up specially for you and your floor problems. It takes into account the type of flooring material, the floor's location, the kind and amount of floor traffic, and your standards for appearance

Branches in Principal Cities

—sanitation—safety.

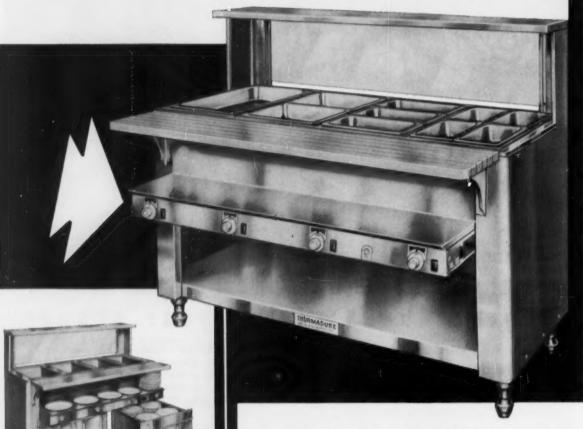
ST. JOSEPH,

ST. JOSEPH, MISSOURI Passaic, N. J. San Jose Calif. Ask for a Survey on your floors, by your nearby Hillyard "Maintaineer".®
This service is without charge or obligation—a Nation-wide staff of Hillyard "Maintaineers" (trained floor consultants) "on your staff not your payroll." There's a "Maintaineer" near you to help you plan the most efficient, economical floor treatment and maintenance plan for YOUR floors.

St. Joseph					
on my flor	e a Hillya	rs Maintain digation)	eer call to	moto s l	مرابع درمیرد
Name			*************		
Institution	***************************************				
Address	*************			**************	

NO OTHER FOOD WARMER OFFERS YOU ALL THE ADVANTAGES OF





DUKE MANUFACTURING CO. Dept. S-10 2305 NO. BROADWAY, ST. LOUIS 6, MO.

Please send complete information on Cafeteria Counters Food Warmers

NAME_

ADDRESS.

CITY AND ZONE STATE

These new Thurmaduke Models were designed feature by feature to save you endless hours of wasted time and many wasted dollars.

The new built-in dish slielf keeps your dishes handy, puts the controls at your finger-tips, easy to see, easy to adjust.

On electric models, a master control switch on the right end of the shelf turns the entire unit on and off without disturbing individual thermostat settings for each food compartment.

Heavy insulation in all four sides and bottom of each heating compartment reduces heat loss and provides maximum heat control.

All welded bodies of stainless steel or paint-grip steel with two coats of Thurmaduke Gray Enamel are designed for rugged service, easy sanitary maintenance. Aluminum alloy corrosion resistant adjustable legs are dirt, water and bug-proof. Sectional hard maple carving board can be removed without tools for cleaning.

A new dish truck model is also available (small illustration). Each truck holds 112 nine inch plates which are kept warm by a concealed heating element which plugs into any standard 110-120V outlet.

SCHOOL LUNCH





The small storeroom at left, in one of Trenton's junior high schools, features easy-to-clean, adjustable metal shelving. At right is the large walk-in refrigerator at Central High School.

Purchasing and Storing Food

by KATHLEEN WILSON Supervisor of Cafeterias Board of Education Trenton, New Jersey T HE purchasing of food, and its proper storage are so integrated that one can hardly be separated from the other.

We in school lunchrooms, are fortunate to a certain degree in being able to judge our purchasing by our student enrollment—a fact not often appreciated, but one envied by the commercial cafeteria manager. In other words we can better judge our purchasing by this factor, but must always be controlled, nonetheless, by the storage space available for such purchases.

It is always wise to have two or more dealers for all quantity purchases, for thus we have both competitive and comparative buying. Know your vendor by reputation as well as by the goods he sells. Is he dependable, and helpful? Can you rely on him when you need his services?

Many of us learned through the difficult war years how great a help a good dealer is, as we needed his unswerving service and advice more and more. Today that same need exists, albeit the exigencies of war have abated. In turn, our dealer needs us, the purchaser, and this mutual dependency should establish a fine working relationship.

Ask yourself these questions: Are shipments made when promised? Will he deliver to your second floor cafeteria, or will the goods be left at your school door? Will he be the first one to notify you of a future advance in prices, before they advance? Will he let you know when he has a good buy on an item you use in large amounts? All these are important

factors to be considered.

There are two types of purchasing: by competitive bid, or by frequent ordering, or "spot" buying. Considerable savings may be made on quantity purchases by concentrating the purchasing of canned goods to two or three times a year only.

If this is done, a bid, or quotation sheet should be issued the dealers, noting the items and amounts need-

1, 2, 3, 4 LEVEL BANDSTANDS

1-LEVEL PLATFORMS, STAGES

For sponkers, raised speakers tables, esremonies, acts, style shows. Quick set-up or removal. Used in Schools, Colleges, Churches, Hereis, Clubs, Lodges, Each unit only 2½'s thick when folded. Store in small space.

USE THE SAME UNITS FOR

MANY DIFFERENT ARRANGEMENTS

1, 4, 3, 7 Exths british and OR-"U" shaped set-up for BANDS and OR-CHESTBAS allow unobstructed vision of musicions, director and audience. Impreve appearance, discipline and director control. Same units set-up in a straight line can be used as steep-up a outlance senting risers. ed; specifying exactly the quality desired; requesting brand names (which will usually designate the grade); size of can, weight, price per case; and with fruits, the density of the syrup it is packed in. Canned fruits are graded 1—Fancy, 2—Choice, 3—Standard. Canned vegetables are graded 1—Fancy, 2—Extra Standard, 3—Standard.

Know what type of product you want. With the above grading to guide the buyer, we can go further, and test the product by requesting several dealers to submit a sample of the desired grade of canned goods

ROOM OR HALL, ANYTIME

FOLDING STANDS

* 4'x8'x3/4" Tops, 8"16" 24" 32" heights

Write for Descriptive Folder

MITCHELL MFG. CO.

2726 5. 34th St. . Milwaukee 46, Wis

Nitchell PORTABLE

* Each unit a SAFE stand in itself

MFRS. of MITCHELL FOLD O'LEG TABLES, BAND AND CHORAL STANDS, SEATING RISERS

* Strong, rigid TUBULAR STEEL LEGS

we want. Then the drained weight of the item is taken. Each item should be drained for exactly the same length of time for accurate results.

In this manner we frequently prove that the lowest price does not always give the greatest yield. It is by such testing we arrive at cost per portion—a most important factor.

Learn about pack

In purchasing canned goods be sure you know what pack you are buying. You must realize, too, that in purchasing fresh pack it must be a seasonal purchase, and should be planned accordingly, if fresh pack is desired. For example, tomatoes will not be available when early June peas arrive in the market.

Know your needs. In other words, one must know what size can to purchase. Large cafeterias may well use the entire contents of the large No. 10 size, but it is wise to remember that smaller schools cannot always use this amount, and money may be saved in the end by purchasing the No. 5 or No. 2½ can.

We have been speaking mostly in terms of bid purchasing of canned goods. In buying fresh meats and vegetables, however, another type of purchasing must be considered—that of weekly purchasing. Here again we must know and depend on the dealer. Trips to market give one the advantage of personal selection, and an opportunity to see what is available.

Keep purchase records

Careful records of purchases are invaluable to any person carrying the real responsibility of quantity purchasing. This includes everyone from the supervisor of several cafeterias to the manager who buys just for her own school. These records should include the date of purchase, order number, name of dealer, the amount, grade, unit price and total cost.

At any time during the year one may subtract the present inventory to arrive at the amount used. We find this a satisfactory method, as no storeroom is left over-stocked in June with old pack canned goods.

The proper storage of foods can-





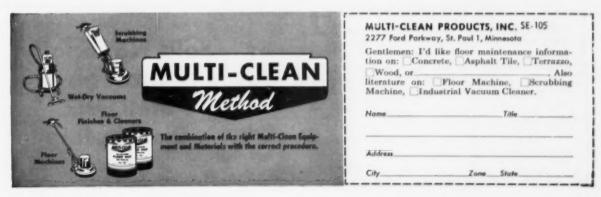
Long Island Schools Cut Floor Maintenance Time and Costs with MULTI-CLEAN Equipment

This classroom floor of gleaming asphalt tile is in the East Lake Grade School, Massapequa Park, Long Island, New York. The school is one of four in the system using MULTI-CLEAN 16" and 22" floor machines and MCV-220 industrial vacuum cleaners.

"Bud" Jesseau, superintendent of buildings in this modern school system says, "Our MULTI-CLEAN equipment is tops, and since we've been using it, we've cut our maintenance time and labor costs considerably.

"We wax and burnish our floors three times a year, and daily maintenance during the school year requires only damp mopping. It's as simple as that with the MULTI-CLEAN METHOD and our floors keep their clean and polished appearance all the time."

For more information about the MULTI-CLEAN METHOD of floor care, mail the coupon below. Your local MULTI-CLEAN distributor will be glad to help you with any floor problem without obligation.



NOW! LONGER FLOOR WEAR WITH LESS CARE!



FOR TOUGHEST TRAFFIC
AREAS, YOU CAN'T BEAT
SIMONIZ' NEW COMMERCIAL
HEAVY DUTY FLOOR WAX—
IT'S GOT THE
"SIMONIZ SECRET!"

SELF-POLISHING! BUFFABLE!

For asphalt, rubber, vinyl, cork, linoleum, and other floors. Automatic high-gloss beauty. Safety approved by Underwriters' Laboratories, Inc. Pure wax finish resists dirt, wear and water, yet strips easily when required. Simoniz Commercial Heavy Duty Floor Wax. Available in 1, 5, 30, 55 gallon sizes.

COMPLETE LINE

- 4 MORE WAYS TO GIVE YOUR FLOORS AND FURNITURE SIMONIZ TRAFFIC-PROOF BEAUTY
- * SIMONIZ COMMERCIAL NON-SCUFF FLOOR WAX
- * SIMONIZ COMMERCIAL FLOOR CLEANER CONCENTRATE
- * SIMONIZ "AAA" COMMERCIAL PASTE FOR FLOORS
- * SIMONIZ COMMERCIAL HILITE FURNITURE POLISH

- MAIL THIS COUPON TODAY -

Simoniz Company (Commercial Products Division—K4)
2100 Indiana Avenue Chicago 16, Illinois

Gentlemen:

Please send name of nearest Simoniz distributor.

Without obligation, please send details of your Commercial Products for floor and furniture maintenance.

Name

Firm Name.

My Title

Street Address.

City

State

Sold Nationally through SIMONIZ Distributors

LUNCH

not be stressed enough. Do you have enough refrigeration space? What about your storeroom? Too many school cafeterias have been planned and built without any regard to this last question. As a result, too many are working from cramped and inadequate storerooms, that never have been large enough in proportion.

Storeroom factors important

This is exactly why the storeroom controls your power of purchasing with the proverbial "iron hand." With a good storeroom, quantity purchasing may be done a few times a year, and to good advantage, as lower prices are offered for quantity. It would seem that few school architects ever consider this factor.

We are fortunate in Trenton, for our high school has a large walk-in refrigerator, and two more-than-sufficient storerooms. One of the storerooms is used for the working stock, and the larger for the storage of extra large purchases, government commodities, and equipment.

We use this storeroom for storing foods the five junior high schools cannot properly care for. As the small storerooms in these schools empty out during the year, the goods are moved into the junior highs from the high school.

Refrigeration highlighted

Good refrigeration is all important. We are not all fortunate in having large refrigerators, but let us hope they are sufficient to meet our needs. Freezers will eventually be a part of very school kitchen, but at present the school cafeteria looks upon it as future luxury, rather than the necessity it soon will be.

In summary then, we cannot help but integrate the purchasing of foods with the storage of it. The cheapest price may not always be the lowest in the final analysis. Long experience and wise judgment have proved this fact to many. Above all, remember that good purchasing is never a "hit or miss" proposition at any time.





4 cinch Ganax with Ganax MINTENAN

It waxes as it cleans!

REDUCES THE FREQUENCY OF REFINISHING

Sanax was developed to permit frequent cleaning of waxed floors without washing away the finish . . . and to eliminate waste in wax and labor. A neutral liquid soap with a wax base, Sanax not only quickly removes dirt, oil, and grease, but leaves a thin film of wax. In fact, regular use of Sanax to machine-scrub or damp-mop waxed floors actually prolongs the life of the finish, and thereby reduces refinishing costs on a year-to-year basis.

Like all Finnell Fast-Acting Cleansers, Sanax is specially designed for the greater speed of machine-scrubbing, and works as effectually in a Combination Scrubber-Vac as in a Conventional Scrubber-Polisher. And because Sanax is processed from pure vegetable oils, it's safe for all floors.



Find out how you can simplify and reduce the cost of caring for waxed floors. There's a Finnell Floor Specialist nearby to help you choose the waxes and cleansers that are exactly right for your needs. Finnell makes a complete line, so you can depend on unbiased advice. In fact, Finnell makes everything for floor care! For consultation, demonstration, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 3110 East Street, Elkhart, Indiana. Branch Offices in all principal cities of the United States and Canada.



- A mild liquid wax-soap for machine-scrubbing or damp-mopping waxed floors
- Leaves a lustrous antiskid protective finish
- Highly concentrated . . . economical to use

FINNELL SYSTEM, INC.





BRANCHES IN ALL PRINCIPAL CITIES

New Product

Reviews

BUILDING PRODUCTS

- Continued on page 170

SE-501

Troffer Acoustic System

Reduces Construction Costs Sharply



School building costs can be reduced considerably through use of Detroit's new TAC system. These troffer and acoustic panels provide permanent long-span forms for concrete joist construction and an acoustically-treated ceiling with recessed lighting troffers.

The TAC panels are each 24" wide and are designed for long span. The acoustical panel is perforated and "backed up" with a non-combustible acoustical element to insure a high acoustical rating. The troffer panel provides a housing for minimum-cost fluorescent fixtures and plastic diffusers for recessed lighting and flush ceilings.

DETROIT STEEL PRODUCTS Co., East Grand Blvd., Detroit 11, Mich.

FOOD SERVICE

- Continued on page 176

Paper Food Service SE-502 Dishes Are Disposable

The well-known Dixie Cup Co. now offers a complete matched paper food service, consisting of several different sizes of cups, plates, salad and dessert dishes, juice and water glasses, etc. A number of the units are plastic-coated and moisture-proof.

The big feature of this line is the fact that there is no possibility of not having enough dishes, cups, and glasses properly sterilized. Dishwashing and breakage are eliminated. The service is also easy to handle and light to carry.

DIXIE CUP Co., Easton Pa.

MAINTENANCE

-Continued on page 184

Power Handle SE-503

Is Used with Accessories



The Power Handle is a lightweight portable source of power adaptable to use with a wide variety of operating units for campus maintenance. Weighing 39 lbs., the handle is a self-contained, detachable unit powered by a 23/4 h.p., four-cycle Briggs and Stratton engine.

Five basic operating components are available for use with the Power Handle: 21" self-propelled reel-type Sportlawn mower; 20" self-propelled rotary-type Whirlwind mower and leaf mulcher; 17" tiller; trimmeredger; and a 17" snowplow.

Attachment of the Power Handle to any of the components can be accomplished in about 20 seconds without any tools.

Toro Mfg. Corp., Minneapolis, Minn.

CLASSROOM EQUIPMENT

-Continued on page 190

SE-504

Auditorium Chairs

Five Folding Models Available



There are five different models to choose from in the Hampden line of folding auditorium chairs. The frames are all made of strong tubular steel or rigid channel steel. All metal parts are rust-resistant. The finish is baked-on, chip-resistant in beige or gray, and the fabrics are soil, water, alcohol and heat resistant.

Backs are contoured and seats are designed for comfortable seating. One of the models comes with a contoured, wood-grained plywood seat.

HAMPDEN SPECIALTY PRODUCTS, Inc., Easthampton, Mass.

BUILDING PRODUCTS

Building Material SE-505

Is Resilient, Durable

Surco is a new latex-water emulsion binder that changes brittle mortars, concretes and plasters into materials that have the qualities of resilience, adhesion, elasticity, and durability. Furthermore, these materials will now bond to concrete, masonry, tile, wood, metal and even glass.

Surco coatings are used for flooring, roofing and waterproofing, stucco and plaster.

SURFACE COATINGS, INC., 110 Pear St., S.E., Atlanta, Ga.

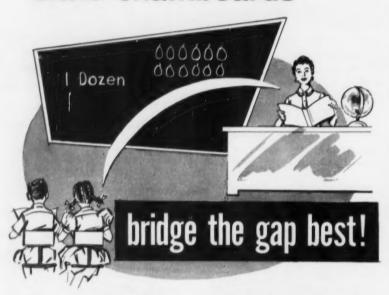
Suspension System SE-506 Permits Complete Flexibility

Flexibility that permits moving lights and other ceiling fixtures in acoustical tile ceilings, one module

SE-411

SI

slate chalkboards



SUPERIOR VISIBILITY MEANS QUICKER . . . EASIER TEACHER-STUDENT COMMUNICATION.

Slate chalkboards command attention. The high degree of contrast between message and background on a slate chalkboard means a clear, easy-to-see, easy-to-grasp message... one to which the student instinctively responds. It's an invaluable aid to the teacher in classroom work... and an economical one, too... a one-time investment in dependability and eye-soothing service.

write for your free 12 page illustrated copy of "SLATE CHALKBOARDS IN MODERN SCHOOLS"



Little Known Facts About Slate Chalkboard Visibility Tips on Chalkboard Maintenance Geographical Listing Of Outstanding Shools using Slate Chalkboards Cost Comparisons Authoritative Bibliography

PENNSYLVANIA SLATE PRODUCERS GUILD INC.

205 REALTY BLDG.

PEN ARGYL, PENNA

500 Million Years in the Making . . . NATURAL SLATE



or a dozen, in just a matter of moments is a feature of Accesso suspension system.

This is a fully concealed system of steel channels and hangers that may be installed with minimum labor. It presents an excellent finished job with any size or make of tile and permits instant access by maintenance men through any single tile or a number of tiles any place in the ceiling. Air conditioning, telephone lines, electrical ballasts are instantly accessible and may be repaired or moved without damage to a tile.

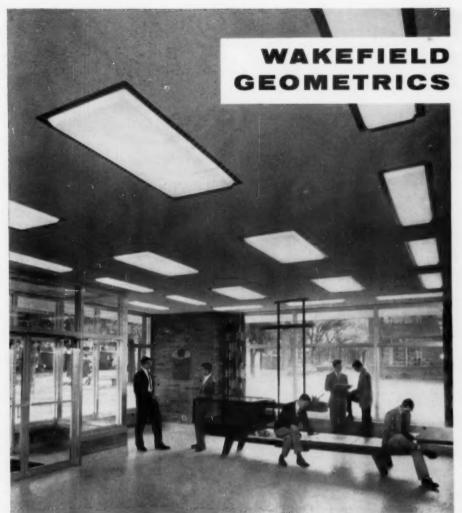
Accesso Systems, Inc., 4615 8th Ave., N.W., Seattle 7, Wash.

Space Heaters SE-507 For Large Warm Air Heating



The Commercial-Aire Direct-Fired Space Heaters are heavy-duty units ranging from 300,000 to 2,000,000 btu bonnet output making "Automation" in heating available to the schools. The Automation principle is obtained through the full protection of electronic flame controls and completely automatic, unattended, efficient, and economical heating. Each unit is completely assembled, wired, and fire-tested before shipment.

Use of discharge heads or installation into ductwork or a combina-



Another Installation

William E. Wickenden Electrical Engineering Building, Case Institute of Technology, Cleveland, O.

Architects and Electrical Engineers: McGeorge-Hargett and Associates.

Electrical Contractor: Dingle-Clark Company.

Lobby of New Electrical Engineering Building at Case Institute of Technology lighted by Wakefield Beta Units

Setting the keynote of this new building is its handsome lobby, where Wakefield Beta units have been used to supplement the daylight and complement the simple modern design.

Beta recessed luminaires are often specified for this type of area in colleges and schools, as well as for classrooms and laboratories. The Rigid-Arch plastic diffusers distribute the light evenly throughout the room, providing a comfortable environment with a

THE WAKEFIELD COMPANY

WAKEFIELD LIGHTING LIMITED

minimum of direct or reflected glare. And when the lamps are not lit, their matte finish prevents mirroring of reflections from the windows.

Beta units come in four sizes: 4'x4', 2'x4', 2'x2' and 1'x4'. Write for a brochure describing and illustrating Beta and other Wakefield Geometrics in considerable detail.

Wakefield Sigma, Cavalier, Grenadier and 35.65 Industrial units are installed in other areas of this modern building, which is virtually a laboratory of illumination.



BUILDING PRODUCTS

tion of both can be accomplished with ease with the Commercial-Aire which is made for use with light or heavy oil, gas, modulating or combination burners. The heaters can also be supplied with blower compartment separate for air conditioning installations with "face and bypass" dampers in the standard FD series. Floor, suspended horizontal,

and suspended inverted installations can be made with standard units which require no major modification.

THE MAMMOTH FURNACE Co., 509 Vandalia St., St. Paul 4, Minn.

Lighting Unit

SE-508

Is Recessed

Smitheraft has developed a new line of 24" wide troffers. No catches, latches, hinges, screws or bolts are

visible to the eye, making for a trim ceiling effect.

This recessed lighting unit is supplied with or without integral trim flange. A large selection of shielding media, from louvers and glass to plastic dish, is available. Louvers hinge from either side and can be completely removed without tools or loose parts. All glass and plastic shielding is completely enclosed in door frames, making it simple to remove and replace for cleaning or maintenance.

SMITHCRAFT LIGHTING DIV., Chelsea 50, Mass.

Convector Radiation SE-509 Designed for Heavy-Duty Applications

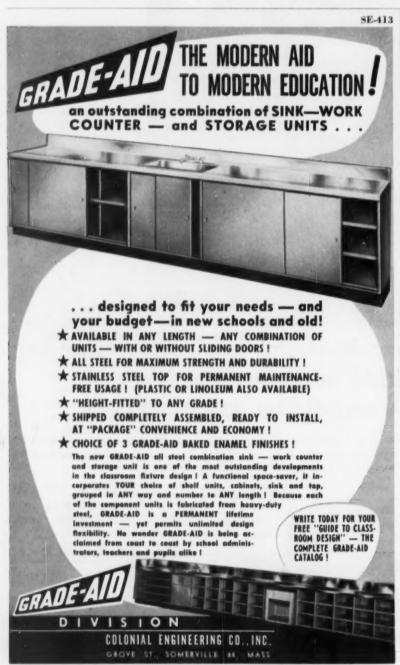


Modine Mfg. Co. announces a broad new line of convector radiation incorporating 30 different types and over 8,000 sizes.

With the exception of the Type F Deluxe Floor Cabinet, all enclosures have been completely redesigned to give architects and engineers greater freedom in adapting convectors to modern building design.

The line includes free-standing, fully and partially recessed, concealed (plaster-front) and wall-hung models. Most of these types are offered in standard gauge enclosures as well as in heavy-gauge enclosures.

MODINE MFG. Co., Racine, Wis.

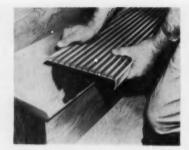




Safety Stair Treads SE-510 Are Easy to Install

Worn stairs can be leveled and made non-skid through the application of Stairmaster extruded aluminum safety treads.

Eleven abrasive ribs dovetailed into the Stairmaster safety treads insure their slip-proof quality. Repairing treads in this manner is less expensive than replacing the worn treads.



The treads come in a standard width to fit all stairs and are factorycut to length as required.

WOOSTER PRODUCTS, INC., Wooster, Ohio.

SE-415

International

School Seating Combines

Economy with Strength

No other school seats include so many construction, installation and maintenance features — assuring utmost in economy and long-time service for your school. Deluxe, upholstered all-steel seats and hardwood plywood seat and back budget-priced seats have been the choice of schools

everywhere for over 30 years. Hingeless seat construction assures noiseless, trouble-free service. Comfortable design minimizes student disturbance. In short, International school seats are the seats that taxpayers, school officials and students approve.





Typical installation of International school seats—noiseless in use, they require a minimum of maintenance and care.

For complete specificacations and photographs of International school seats in your area, write, wire or phone today.



INTERNATIONAL SEAT CORPORATION . Union City, Indiana

SEATING

Radiant Ceiling SE-511 Provides Heat and Sound Control



The Burgess-Manning Ceilings are of perforated aluminum panels attached to water coils which in turn are covered with acoustic-thermal blankets for sound control. Hot water circulating through the coils warms the entire ceiling which radiates into the classrooms.

The illustration shows a classroom in the Flint, Mich. Junior College with a Burgess-Manning radiant ceiling installation.

Burgess · Manning Co., 5970 Northwest Highway, Chicago, Ill.

Incinerator SE-512 Has New Feed Doors

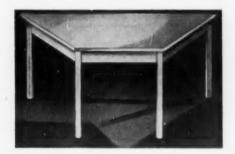


Winnen Incinerators are now available with a choice of double feed doors or the new Guillotine feed door. The Guillotine door is now standard equipment on the larger models. This door make a loading bar unnecessary and thus lowers the loading height.

The Guillotine door is a single sheet of heavy gauge steel with a refractory lining. The door slides up to open while the double doors open conventionally.

Illustrated is Model C-10 with the new door.

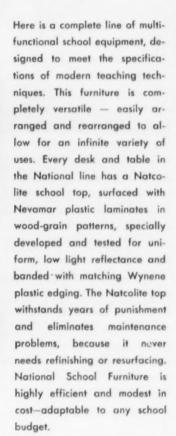
WINNEN INCINERATOR Co., 932 Broadway, Bedford 96, Ohio.



Trapezoidal Multi-Mode Table, No. 2330

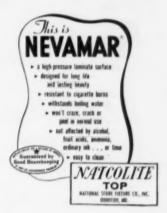
For maximum flexibility... National Multi-purpose School Furniture fulfills every classroom requirement

With the exclusive NATCOLITE Laminated School Top

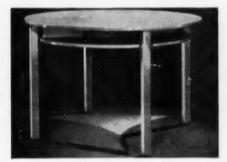




National School Chair, No. 2610 Deluxe No. 2710 Standard



 Write today for the complete new catalog of the National line of multi-purpose school furniture.



Round Table, No. 2320



Study Table, No. 2310



National Folding Table

NATIONAL SCHOOL FURNITURE COMPANY

Div. of National Store Fixture Co., Inc.

ODENTON, MARYLAND

Apple Vendor SE-513 Apples Are Refrigerated

The Frigid Fruit Apple Vending Machines, in addition to a vending capacity of from 200 to 300 apples, have a refrigerated storage space for four full boxes. This makes it possible for any local wholesale produce house to deliver a supply of apples without the school having to

keep them in a warm room.

In addition to the health value of the apple, the schools have shown a tremendous profit—an aid in many school projects.

FRIGID FRUIT Co., 1301 S. 20 Ave., Yakima, Wash.

Plastic Dinnerware SE-514 Carries One-Year Guarantee

Educational Laboratory Equipment

44-PAGE CATALOG of Kewaunee Educational Laboratory Equipment for Secondary Schools and Junior Colleges. Shows complete line of matched standard units in tables, laboratory sinks, desks, fume hoods, specific purpose units, service fix-

48-PAGE PLANNING MANUAL with 19 plans showing the latest and most modern layouts for science laboratories in secondary schools and junior colleges. In addition, these same plans are shown in

1. Secretary School !

Junua Colleges

Meladur Dinnerware is offered

SE-417

with a one-year guarantee against chipped, cracked, or broken dishes. Meladur is made extra thick, has a greater density, and is heavier. All Meladur pieces have a serrated bottom which prevents the dishes from sticking together and permits complete drainage and air-drying without water spots.

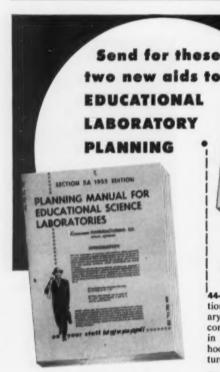
The line consists of 20 pieces in five beautiful pastel shades and two deep tone, contrasting colors.

MIDLAND EQUIPMENT Co., 845 Chicago Ave., Evanston, Ill.

Vegetable Peeler SE-515 Peels 20 Lbs. in 1 Minute



The new Univex Model G Peeler is adaptable for either bench or permanent installation. Among the features of the machine are: automatic dial-control for selective timing and automatic shut-off to prevent overpeeling; powerful 1/3 hp electric motor with double V belt drive and automatic tension take-up for maintaining positive power; stainless steel drive shaft housed in lifetime lubricated bearings; splashproof snap-on cover with hinged opening; extended discharge chute; quick E-Z



Both Free

MAIL COUPON FOR FREE COPIES visual perspectives. A real help in planning the most efficient layout for your science laboratory. Roughing-in layouts for services and dimensional elevation drawings of equipment are also included.

tures and accessories.

Kewaunee Mfg. Co.
J. A. Campbell, President

5031 S. Center Street, Adrian, Michigan Representatives in Principal Cities

KEW	AL	INEE M	FG.	co.	
5031	5.	Center	St.,	Adrian,	Mich.

Please send, without cast or obligation:

- ☐ Educational Laboratory Equipment Catalog, Section 5
- Planning Manual, Section 5A.

Title	
Address	
City	



ALL BERLIN REPRESENTATIVES ARE TRULY... Peating

- FACTORY TRAINED
- EXPERIENCED IN SEATING PROBLEMS

They have the "know-how" to solve the most complicated seating problems, because the men who call on you are men who have years of bleacher experience and who make periodic visits to our factory to equip themselves with technical knowledge of BERLIN BLEACHERS... this factory training is a "must" for men to represent Berlin Bleachers. That's why we say Berlin representatives can truly be called "seating engineers"... they are specialists in seating arrangements.

THERE'S A BERLIN REPRESENTATIVE NEAR YOU!

BERLIN EZ-A-WAY BLEACHERS

Enthusiastically endorsed by Industrial commissions and other state agencies throughout the country . . . BERLIN BLEACHERS have never been refused approval wherever sought . . . there are over two hundred BERLIN BLEACHER installations throughout the country.

BERLIN EZ-A-WAY Bleachers offer maximum floor utility... designed in compact units that when not in use are pushed back to the wall... easy movability of these folding bleachers is an outstanding engineering accomplishment... plus their flexibility — one or more rows can be used in complete safety... special locking device is standard feature... perfect alignment always... opens and closes like desk drawer.

If there isn't a BERLIN BLEACHER installation in an area convenient to you, it is our policy to bring a sample unit to your school for demonstration purposes. This unit is **not** a miniature nor model but an **actual full size unit**. It will pay you to see BERLIN BLEACHERS before you complete your seating plans.

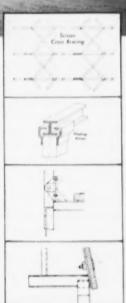
BERLIN BLEACHERS are manufactured in a plant that has specialized in steel fabrication of low tolerances since 1909 ... your guarantee they are made right.



SCISSOR CROSS BRACING—prevents lateral "deifs" and retains parallelism of movable tiers with each other and fixed rear weldment . . . also ties movable tiers to locked front tier section and prevents closing due to front sway load.

"FLOATING" ACTION in opening and closing bleachers assured by slide support bracket—a new design feature that provides for vertical adjustment of slide arm, independent of the leg. . assures even spacing between riser boards for neat appearance when closed.

OPTIONAL EQUIPMENT—mobile sections can be furnished 3 to 12 rows high and 8 ft. 12 ft. or 16 ft. long Guide rails of 1" diameter or larger pipe are placed on open ends of all sections five rows or higher. End panels furnished for open sides of closed bleachers. Aisles provided where required. Score fables 8 ft., 10 ft., 12 ft., Formica top, removable type.



WRITE for complete information . . and list of installations in your area.



BERLIN • WISCONSIN

FOOD SERVICE

lock door and a new air gap type water inlet.

Universal Industries, Inc., 360 Mystic Ave., Somerville 45, Mass.

Table-Bench Units SE-516

Designed for Low Clearances

Schieber Mobil-Fold folding port-



able table and bench units for cafeteria seating are now available in 12 foot models in addition to the 14 foot unit. The new model consists of two tables and four benches, each 12 feet long, with a total seating capacity of 32 children.

The tables and benches of these units fold in the center and lock vertically into their own all-steel, caster-equipped carrier.

Schieber Sales Co., Detroit 39, Mich.

SE-419



They'll all cheer your choice



Note the smooth, even surface of this battery of four Red Laykold tennis courts recently installed for a Providence, R. I. high school.

... when you specify LAYKOLD ** tennis courts for your high school

From every standpoint—Student, Parent, or School Board Member—Laykold Tennis Courts are the best choice for your school because:

For the student, they provide a smooth, true plane for a fast and accurate game with less fatigue.

For the parent, they offer resilient, non-abrasive surfaces that are *safe!* Shoes and equipment last longer.

For the school board, they represent a sound first investment with tough, durable surfaces that resist wear and hold maintenance to a practical minimum.

You can get full information by writing for our full-color booklet, "Laykold Tennis Courts." Send for it today.







AMERICAN
Bitumuls & Asphalt

200 BUSH ST. . SAN FRANCISCO 4, CALIFORNIA

E. Providence 14, R. I. Perth Amboy, N. J. Baltimere 3, Md. Mabile, Ala. Cincinnati 38, Ohio Calumbes 15, Ohio Tucson, Ariz. Seattle, Wash. Baton Rouge 2, La. St. Louis 17, Mo. Inglewood, Calif. Gakiand 1, Calif. Portland 7, Gre. Washington 5, D. C. Sas Jasa 23, P. R.

Dishwashing Detergent Eliminates Water Spotting

Oakite DCM is a new detergent which keeps machines free of deposits while it washes dishes. Possessing a high degree of lime sequestering power, the product is especially useful in hard water areas, eliminating water spotting on glasses and dishes, and preventing scale buildup on the machine. Dishes dry fast and bright.

Effective in concentrations as low as $\frac{1}{8}$ oz. to the gallon.

OAKITE PRODUCTS, INC., 157 Rector St., New York 6, N. Y.

Popcorn-Soft Drink SE-518 Machine

For Athletic Stadiums

Manley Inc. announces the Coliseum Model, a combination of a soft drink machine and a popcorn dispenser. The drink machine is a 2-faucet Ice-O-Bar, and has a capacity of 1,000 soft drinks, at a temperature of 40° or less with three volumes of carbonation hourly, provided the incoming water temperature is 80° or less and an adequate supply of water is available.

The small compact unit gives the equivalent in ready capacity of 18 cases of bottled drinks. Reserve cold storage in the refrigerator compartment for an additional 6 gallons of syrup gives reserve capacity equivalent to an additional 27 cases of bottled drinks.

The popcorn machine has an Aristocrat cascade kettle, an elevator



Sylvania CP-242 Trimline fixtures bring balanced brightness, minimum glare to the kindergarten room of the new Bowen School, Newton, Mass.

R no Frotect To protect young eyes

NEEDED: A true "Luminous Environment" with balanced lighting

PRESCRIPTION: Sylvania CP-242 Trimline Fixtures

A high over-all quality of illumination in every room (far more than mere foot-candle level) was the order of the day when the city of Newton, Mass., built its modern Bowen School. Authorities insisted on a true "luminous environment."

Noted school architect Louis W. Ross of Boston specified high-reflectance ceilings, walls, floors and furnishings for every classroom; light-green chalkboards; combination fenestrations of prismatic directional glass blocks with natural clear glass strips below; and 2 continuous rows of Sylvania CP-242 Trimline fluorescent fixtures with all-plastic, low-brightness shielding (separate switch control for each row).

Result: Equalized lighting level in every classroom location . . . adequate illumination level for all students . . . with relative freedom from glare and over-brightness at any point.

SYLVANIA[®]

... fastest growing name in sight
Lighting · Radio · Electronics · Television · Atomic Energy

Improved seeing and reading conditions have led to better reading and study habits. What's more—the CP-242 fixtures require maintenance only twice a year, during Christmas and Summer vacations.

This is only one of many lighting "prescriptions" that could be compounded for your needs with Sylvania's full line of school fixtures. Have the Sylvania lighting specialist in your area drop in for a consultation or group meeting at any time—he is a qualified expert in all phases of school lighting.

SVEVANIA PER	CTRIC PRODUC	TS INC.			
	ne 48th Street,		18/	A Films Lands	

Please send me your free informative booklet, "Some Whya and Hows of Modern School Lighting."

--- SEND THE COUPON FOR PREE INFORMATIVE BOOKLET ---

☐ Have a Sylvania lighting specialist call on me.

Name	T	itle
Organization		
Address		
City	Zone	State

CONCEPT IN SCHOOLROOM DESK SEATING

In complete harmony with the new ideas being built into modern schools, Rota Desks present the most advanced thinking in school-room seating. Because of their unique design they will be found to be completely functional. They give the final touch of "modernness" to new or remodeled schools.

Rota Desks are light, easy to move to change arrangement or for cleaning.

Rota Desks give full foot freedom—with no shoe-scuffing base. Correct posture comes naturally.

Rota Desks are tip proof. Try them. See how the weight is centered to assure balance at all times.

Rota Desks are built of strong welded steel tubing with shaped plywood desk top ample for both left and right hand use, and shaped plywood seat.



Rota Desks are offered in three sizes—to suit all grades through high school.

They thrive on use—defy abuse



- Before furnishing a modern or modernized school—get all the data on Rota Desks. Col-
- orful literature and samples sent on request.



BECKLEY-CARDY COMPANY .

1900 N. NARRAGANSETT

Manufacturers

CHICAGO 39, ILL.

You clean any type flooring

faster-better-more economically

with **BRILLO FLOOR PADS**

You get cleaner floors with a longer lasting gloss at lower maintenance cost when you use Brillo Solid Disc Steel Wool Pads.

Solid Disc Gives Greater Coverage! The entire surface of a Brillo Floor Pad works for you—cleans all the floor it covers . . . saves time. Cleans and buffs at one time . . . saves labor. You get cleaner floors with less swirl marks.

Lasting sporkle for your floors! Brillo Floor Pads speed the waxing process—bring out floor beauty quickly—because cross-stranded Brillo metal fibers give gentle abrasive action in every direction. A daily once-over with a dry Brillo Floor Pad easily removes dirt, grime, scuff marks—avoids wax build-up—eliminates frequent stripping and rewaxing.

Efficient...easy to use! Place pad under brush of rotary floor machine. Operate as usual. Brillo Floor Pad stays in place . . . does not buckle . . . machine does not bounce. Sizes for every machine. All grades for every job.











SE-424

Brillo Pads clean and polish Hardwood, Lineleum, Asphalt and Rubber Tile, Terrazzo, Camposition

Available from your dealer in sizes from 8" to 22" diameter and in grades 0, 1, 2, and 3 for any cleaning, waxing or buffing operation. Write for free booklet on complete instructions in modern floor maintenance.

BRILLO SOLID DISC STEEL WOOL FLOOR PADS

SE-423



eld's Leading Padlock Manufacturers

FREE!

FAIRBANKS-MORSE
SAMPLE
SAMPLE
SAMPLE
MIS

8-page booklet

Fairbanks-Morse Generators!

Mail the coupon for booklet showing complete specifications of Fairbanks-Morse power generators for all industrial, contenercial, municipal, and construction usages. Fairbanks-Morse generators range in capacities from 600-watt portables to 125-kw. sets — using gasoline, LP and other gases.



WATER SYSTEMS . GENERATING SETS . MOWERS . MAGNETOS PUMPS . MOTORS . SCALES . DIESEL LOCOMOTIVES AND ENGINES

Gentlemen: Please send your	8-page	book	et on	power	generators
Business name					
Your name					
Address					
City	Zo	ne_	State		

Master Lock Company, Milwaukee 45, Wis.

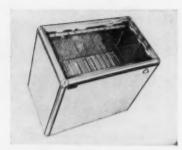
FOOD SERVICE

warmer capable of holding 72 1½ oz. popcorn cartons.

Manley, Inc., 1920 Wyandotte St., Kansas City 8, Mo.

Milk Cooler SE-519 Holds 570 Half Pints

Although the Bevco Dry Cooler has a storage capacity of 570 half pints of milk, it requires only 28" x 48" of floor space. There are no



coils or motors inside the cooling compartment, leaving the entire interior free and unobstructed for capacity storage, easy cleaning, complete sanitation and fast service. Grill dividers for separating the various sizes and types of containers is an optional accessory.

There is a noiseless 1/4 hp sealed refrigeration unit.

Bevco Co., Inc., 3320 S. Broadway, St. Louis 13, Mo.

Rinse Booster

SE-520

Eliminates Need for Hand Toweling

Wyandotte Poreen is a rinse booster for both machine and hand dishwashing operations. Available in cases of 24 8 oz. bottles and 12 quart bottles, Poreen is non-toxic, colorless, and odorless.

Poreen eliminates water spots, streaks, and the need for hand toweling of glass, china and silverware.

WYANDOTTE CHEMICALS CORP., J. B. Ford Div., Wyandotte, Mich.

Spray-Type Dishwasher Removes Lipstick Stains from Glasses



Removal of lipstick stains from glasses without the use of brushes is one of the advantages of a new line of spray-type dishwashers made by Universal Dishwashing Machinery Co.

New, improved wash nozzles, extra driver nozzles and a wash spray system operating above and below the glasses produces an unusually effective spray pattern which penetrates the entire rack area and completely up into all the glasses.

Universal Dishwashing Machinery Co., 37 Windsor Pl., Nutley 10, N. J.



AT NORMAL WALKING SPEED, custodian buffs 21" path, renewing wax at same time. Powerful vacuum picks up soilage.

New Type Floor Machine Maintains Gyms, Classrooms in 1/3 Usual Time

- Works FAST; is self propelling.
- Renews wax and polishes in 1 operation.
- Has powerful vacuum; does a clean job.
- Ruggedly built, yet weighs less than 90 ths. Powered by 1 h.p. motor.

A fast, new type floor machine of exclusive design—with built-in vacuum and a dry-waxing device—attracted special attention at the recent AASA show in St. Louis.

The new machine is self propelled and reportedly maintains classrooms, gyms and other areas in about 1/6 the time ordinarily required. It also provides an exclusive drywaxing and polishing technique for fast, low cost renewal and maintenance of wax coatings on floors.

The machine covers a 21" path; uses a cylindrical drum for buffing, rewaxing, polishing or scrubbing; has powerful vacuum (3450 rpm fan).

Other features include dry wax cartridge, 8½" nose clearance, easy portability (weighs less than 90 lbs.). For details write to the G. H. Tennant Co., 2540 N. 2nd St., Minneapolis 11, Minnesota.

COUNTER MODEL POPPER

The Star 51 counter model popper requires only $3\frac{1}{2}$ square feet of counter space . . . Has efficient thermostatically controlled popping unit. Concession offers the complete line of Star and Cretors Equipment.



\$265.00

ONE STOP SERVICE FOR ALL REQUIREMENTS

WRITE FOR FREE SOTH ANNIVERSARY CATALOG

CONCESSION SUPPLY CO. TOLEDO 13, OHIO KIngswood 2408

\$265.00

SE-427



FARQUHAR GLOBE MODEL ST-12 is a useful tool in teaching the true relation of points on earth to sun and stars. This device, with a Terrestrial globe inside a Celestial globe, shows the true geographic zenith of sun and stars at any time of any day. It clearly demonstrates that the apparent movement of stars in a counter-clockwise direction is due to rotation of the earth on its axis from west to east. Price complete with stand: \$42.50. Write Dept. S.

FARQUHA

3724 Irving Street, Philadelphia 4, Pa.



health and sanitation in washrooms

Your facilities are beyond criticism with these Straubel products - by sanitation standards and economy, both! Highly absorbent, strong-fibred, yet extra-soft tissues do not easily puncture . . . And, Straubel's exclusive "Convenience-Cut" roll dispenses but two sheets at one time - stopping waste and tissue littered floors. You'll save and satisfy with Straubel's hand towels, too, because fewer are needed for a perfect drying job. They come in 100% kraft, semi-kraft or manilla - white, natural or brown - priced to meet every school budget.

FIT ALL STANDARD FIXTURES . . . Don't be mislead - no special cabinets are required for Straubel products. They are made in standard sizes and folds to fit all nationally known fixtures.



STRAUBEL PAPER CO. . GREEN BAY . WIS.

Straubal tissues and lowels are sold thru mer-chants of paper products only. Write for dealer"

FOOD SERVICE

warmer capable of holding 72 11/2 oz. popcorn cartons.

Manley, Inc., 1920 Wyandotte St., Kansas City 8, Mo.

Milk Cooler SE-519 Holds 570 Half Pints

Although the Bevco Dry Cooler has a storage capacity of 570 half pints of milk, it requires only 28" x 48" of floor space. There are no



coils or motors inside the cooling compartment, leaving the entire interior free and unobstructed for capacity storage, easy cleaning, complete sanitation and fast service. Grill dividers for separating the various sizes and types of containers is an optional accessory.

There is a noiseless ½ hp sealed refrigeration unit.

BEVCO Co., INC., 3320 S. Broadway, St. Louis 18, Mo.

Rinse Booster

SE-520

Eliminates Need for Hand Toweling

Wyandotte Poreen is a rinse booster for both machine and hand dishwashing operations. Available in cases of 24 8 oz. bottles and 12 quart bottles, Poreen is non-toxic, colorless, and odorless.

Poreen eliminates water spots, streaks, and the need for hand toweling of glass, china and silverware.

WYANDOTTE CHEMICALS CORP., J. B. Ford Div., Wyandotte, Mich.

SE-521 Spray-Type Dishwasher Removes Lipstick Stains from Glasses



Removal of lipstick stains from glasses without the use of brushes is one of the advantages of a new line of spray-type dishwashers made by Universal Dishwashing Machinery Co.

New, improved wash nozzles, extra driver nozzles and a wash spray system operating above and below the glasses produces an unusually effective spray pattern which penetrates the entire rack area and completely up into all the glasses.

Universal Dishwashing Machinery Co., 37 Windsor Pl., Nutley 10, N. J.



AT NORMAL WALKING SPEED, custodian buffs 21" path, renewing wax at same time. Powerful vacuum picks up soilage.

New Type Floor Machine Maintains Gyms, Classrooms in 1/3 Usual Time

- · Works FAST; is self propelling.
- Renews wax and polishes in 1 operation.
- Has powerful vacuum; does a clean job.
- Ruggedly built, yet weighs less than 90 lbs. Powered by 1 h.p. motor.

A fast, new type floor machine of exclusive design—with built-in vacuum and a dry-waxing device—attracted special attention at the recent AASA show in St. Louis.

The new machine is self propelled and reportedly maintains classrooms, gyms and other areas in about ½ the time ordinarily required. It also provides an exclusive drywaxing and polishing technique for fast, low cost renewal and maintenance of wax coatings on floors.

The machine covers a 21" path; uses a cylindrical drum for buffing, rewaxing, polishing or scrubbing; has powerful vacuum (3450 rpm fan).

Other features include dry wax cartridge, 8½" nose clearance, easy portability (weighs less than 90 lbs.). For details write to the G. H. Tennant Co., 2540 N. 2nd St., Minneapolis 11, Minnesota.

COUNTER MODEL POPPER

The Star 51 counter model popper requires only $3\frac{1}{2}$ square feet of counter space , . Has efficient thermostatically controlled popping unit. Concession offers the complete line of Star and Cretors Equipment.



\$265.00

ONE STOP SERVICE FOR ALL REQUIREMENTS

PORTABLE POPCORN STANDS . KETTLE POPPERS . STAR & CRETORS EQUIPMENT . HOT DOG STEAMERS AND BUN WARMERS . CUPS . PAPER PLATES . PAPER TRAYS . POPCORN . BOXES . BAGS . OILS . COLORING . SNOW CONE EQUIPMENT AND SUPPLIES . DAD'S ROOTBEER SYRUPS AND DISPENSERS . MISSION ORANGE . BEVERAGE DISPENSERS . CANDY FLOSS MACHINES . WAFFLE MOLDS.

WRITE FOR FREE

CONCESSION SUPPLY CO. TOLEDO 13, OHIO Kingswood 2408

\$265.00

SE-427



FARQUHAR GLOBE MODEL ST-12 is a useful tool in teaching the true relation of points on earth to sun and stars. This device, with a Terrestrial globe inside a Celestial globe, shows the true geographic zenith of sun and stars at any time of any day. It clearly demonstrates that the apparent movement of stars in a counter-clockwise direction is due to rotation of the earth on its axis from west to east. Price complete with stand: \$42.50. Write Dept. S.

3724 Irving Street, Philadelphia 4, Pa.



health and sanitation in washrooms

Your facilities are beyond criticism with these Straubel products - by sanitation standards and economy, both! Highly absorbent, strong-fibred, yet extra-soft tissues do not easily puncture . . . And, Straubel's exclusive "Convenience-Cut" roll dispenses but two sheets at one time - stopping waste and tissue littered floors. You'll save and satisfy with Straubel's hand towels, too, because fewer are needed for a perfect drying job. They come in 100% kraft, semi-kraft or manilla - white, natural or brown - priced to meet every school budget.

FIT ALL STANDARD FIXTURES . . . Don't be mislead - no special cabinets are required for Straubel products. They are made in standard sizes and folds to fit all nationally



STRAUBEL PAPER CO. - GREEN BAY - WIS.

October, 1955

Lawn Sprinkler

SE-522

Utilizes Lake Water

You can take advantage of the free water from shallow wells, lakes, streams and cisterns with the Lawn Waterer, a self-contained rubber roller pump made by Hypro Engineering, Inc.

Powered by a 1 hp gasoline engine or a $\frac{1}{2}$ hp electric motor to a top recommended speed of 2600 rpm, the pump will supply enough water for



SF.429



This is one of many styles—all built to assure maximum visibility and usefulness, distinctive appearance and protection against handling, theft, and the ingress of dust or vermin. "Time-Tight" cases are constructed of extruded bronze or aluminum, and incorporate such features as Innerlocking frames, exclusive with Michaels; mitered intersections; no exposed screws (except where necessary for removal of hinged panels), and other structural advantages.

"Time-Tight" cases are available in table, aisle, wall, corner, suspended and recessed styles, and in any practical size. They meet exhibit requirements of universities, colleges, schools, libraries, museums, science laboratories and related types of display rooms. If necessary, Michaels will design special cases to meet specific requirements.

Send for literature which contains illustrations of case styles, complete construction details and specifications.



P. O. Box 668-SE • COVINGTON, KENTUCKY

Since 1870 the name Michaels has been a symbol of exceptionally high quality

two average lawn sprinklers at 30 to 40 lbs. pressure, operating on the positive displacement pump principle.

The pumping unit complete with gas engine, filter and pressure control valve weighs only 62 lbs.

HYPRO ENGINEERING, INC., Dept. KP, 700 39 Ave., N.E., Minneapolis 21, Minn.

Beam Scaffold

SE-523

For Light Fixture Maintenance, Etc.



An all-metal beam scaffold, or hanger, for suspending planking or catwalks from I-beams and girder-type structures, has been introduced by Bil-Jax, Inc. Gravity holds the scissors-hook safely in place on the beam. Used in sets of two or more, these units have stirrups which can handle planks or catwalks up to 14" wide. Units are equipped with fixtures for attaching standard Bil-Jax diagonal braces and guard rails.

Ease of erecting, moving and removing are features which make it ideal on jobs such as light fixture maintenance, ceiling washing and repair, etc.

BIL-JAX, Inc., Archbold, Ohio.

Color Finishes

SE-524

For Old. New Concrete

Kwik-Color Seal and Kwik-Color Wax are a new easy way to add permanent, non-fading color to your concrete floors and, at the same time, eliminate concrete dusting.

The products are designed to be used in conjunction with each other, and are equally effective on old or new concrete. After the floor has been cleaned and etched with a good concrete hardener and etcher, Kwik-Color Seal is applied. This eliminates dusting, makes cleaning easier,

OVER 3000

MAXIM SNOW THROWERS

FROM COAST TO COAST
THROUGHOUT CANADA AND EUROPE

FOR 7 YEARS
THE BEST
SNOW INSURANCE

ON THE MARKET

3 HUSKY SNOW-PROVEN MODELS — 4.6 to 8.2 H.P.

SOLD AND SERVICED THROUGHC. THE SNOW BELT

ILLUSTRATED BULLETINS AVAILABLE

Write Dept TW

THE MAXIM SILENCER CO. 86 Homestead Avenue Hartford, Connecticut



17M X65

SE-431

TWO NEW GRADE-AID UNITS TO FILL YOUR NEEDS!

The first practical all-steel clay storage cart, specifically designed for clay and ceramical The corrosion-proof stainless steel bowl holds up to 150 pounds of clay — heavy-duty casters permit easy handling by teacher and student—non-marking rubber bumpers safeguard walls and furniture! A durable low-cost necessify wherever clay is used!



ART COUNTER!

New combination sink, work counter and storage unit that will solve your art-room problems! Stainless-steel (and maintenance-free) work counter and sink . . four roomy shelves, large enough to hold 24" x 36" art paper . . closed cabinet for supplies! Economical in price — simple to install in minutes!

DIVISION

WRITE FOR FULL DETAILS!

NAME.

ADDRESS.

COLONIAL ENGINEERING CO., INC.

GROVE STREET, W. SOMERVILLE 44, MASS.

October, 1955



STATE.

Hydraulic Lift

SE-525

Reaches 20' Above Floor Level

and beautifies the floor. It dries hard to the touch in 20 minutes.

Kwik-Color Seal develops excellent water resistance in 14 to 20 days after application. To protect it against water during this "curing" stage, Kwik-Color Wax should be applied.

MULTI-CLEAN PRODUCTS, INC., St. Paul, Minn.

Faster and safer than a ladder, and eliminating most uses for scaffolding, the Bulb Snatcher hydraulic lift can be raised and lowered from its rail-guarded 24" diameter platform or from the floor. A 35' Neoprene covered 3-conductor cable conveys the power for the 110 volt electrical system. The full 20-foot height is reached within 45 seconds for



painting, plastering, repairing, and changing light bulbs.

The Bulb Snatcher consists of a rigid frame supported by three 12" wheels; the forward wheel being attached to a tow bar for easy steering. The swiveling rear wheels have locks that hold them straight for better trailing, and foot brakes are supplied with the unit to prevent any movement when it is in use.

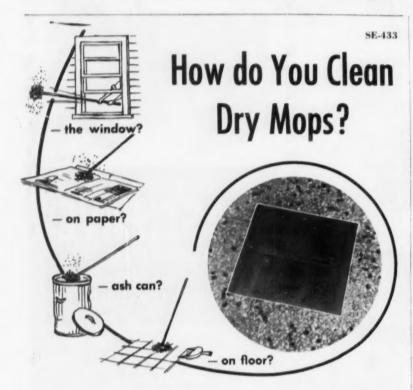
G. W. GALLOWAY Co., 25 N. 4 Ave., Arcadia, Calif.

Floor Machine SE-526 Low Height Eliminates Vibration



The Vestal Floor Machine for scrubbing, waxing, polishing, and light sanding features quiet operation, perfect balance, easy handle, and drip proof motor and gear assembly. The machine is designed with a low center of gravity. The low height eliminates vibration and assures uniform working contact between the brush and the floor.

VESTAL, INC., 4963 Manchester Ave., St. Louis 10, Mo.



There are many ways that are wrong. The one right way is to install Vacuslot plates in all corridors. The operator passes the dry mop over the slot. The strands are pulled in, shaken violently by the inrush of air and all dust goes down to the basement. No time lost — no dust scattered — Vacuslot is the modern sanitary method.

You can use the same system for cleaning floors, pick up spilled liquids, cleaning boiler tubes, machinery, furniture, and the air conditioning equipment. Vacuslots can be installed in any building, old or new. Ask for Bulletin 153.



The Number One Value In FOLDING TABLES

by Midwest

First in value because they have everything you want in a folding table—modern styling... master crafted finishes... ease and safety of handling... compactness for storage... made to last... greatest seating comfort.

tion ulti-

SPACE PROBLEMS SOLVED

Midwest tables are the perfect solution for effortless low-cost conversion of multiuse rooms. The No. 1 choice of leading stools, clubs and institutions because they set up easily, fold quickly, and store compactly when not in use.

CHECK THESE VALUE-PACKED FEATURES

Exclusive "off-center" leg design for seating comfort.
 Exclusive safety lock that secures legs in both folded and extended positions.
 Double-braced legs guaranteed 5 years.
 Smooth sanitary tops sealed and lacquered.
 Chip-proof plastic molding.
 Extension legs available to adjust seating heights.

Whatever your table needs, there are Midwest Folding Tables available to meet them . . . in a complete range of styles, sizes and choice of top materials. Write for Free Catalog today!



FOLDING PRODUCTS

Dept. 6510

Roselle, Illinois

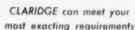
SE-435



FIRST!

. . created all the Major chalkboard improvements.

. . money-saving maintenance . . lowest cost-peryear.



GRAPHOLITE lew price, good quality.

STRUCTOPLATE fine performance all

conditions, all types of buildings, DURACITE. 100 years performance under average use.

VITRACITE. vitreous porcelain enamel steel chalkboard, guaranteed for life of any building.



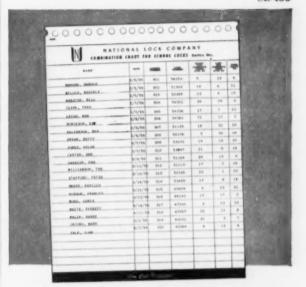
Catalog 55 with complete information on chalkboards, bulletin boards and aluminum trim.

CLARIDGE

6735 N. Olmsted Chicago 31, III.

Claridge

and BULLETIN BOARDS



MATIONAL LOCK MASTER CHARTS

Keep Locker Records At Your Finger Tips

SUPPLIED FREE with lock purchases

You need NATIONAL LOCK'S helpful master record charts for orderly locker control. Simple ...easy-to-use...supplied free with each order of NATIONAL LOCK Combination Locks. With initial orders of 100 or more locks, a handsome leatherette binder for these charts is included. Take advantage of this convenient service.



68-264 SHACKLE LOCK (Masterkeyed)



68-267 BUILT-IN LOCK (Masterkeyed)

write on your letterhead for a FREE sample lock



NATIONAL LOCK COMPANY Rockford, Illinois Lock Division

SE-527 Spirit Duplicator Is Virtually Effortless to Turn



The BDC spirit duplicator features an automatic feed, perfect registration, and a gravity fluid system that eliminates the pump. It is roller moistened by means of a bronze roller that never requires replacement and which moistens to the very top of the sheet.

A four-position pressure control provides longer runs and sharper copy from each master. An automatic master clamp is provided to accept and lock the master instantly.

The BDC is constructed with ball bearings throughout so that it is virtually effortless to turn and substantially reduces operator fatigue.

BOHN DUPLICATOR CORP., 444 4th Ave., New York 16, N. Y.

SE-528 **Collating Machines** Two New Models, Five Sizes



Divided into mechanical Single-Pedal and Double-Pedal types and electric-powered Foot-Button types, the new line of Thomas Collators ranges from 8-sheet to 32-sheet floor models. Each unit is capable of increasing collating efficiency by 400% over hand-gathering methods.

A new Speed Load Control and the recently-developed Stroke-Stop Regulator are located on the front panel of each model. With the Load Control, all feed-fingers can be raised in unison. This allows the operator to use both hands for loading the bins, an important factor when handling large, odd-sized paper.

The Stroke-Stop Regulator permits the operator to automatically adjust all feed-fingers in one operation so that any size paper up to 20" x 17" will be ejected properly.

THOMAS COLLATORS, INC., Dept. M., 50 Church St., New York 7, N. Y.

SE-437 SICO BLEACHER INSTALLATIONS

All at the price of one!

You buy a single Sico bleacher installation and use it indoors for basket-ball and outdoors for baseball, football and other spectator events. Sico portable steel bleachers save money because they're easily and

quickly set up and dismantled; the heaviest part weighs only 90 pounds. Sico's Speedlock contributes to Sico's portability. Safety of Sico Portable Bleachers has been proven in structural load-

ing and wind tests; approvals have been granted Sico bleachers by commercial testing laboratories and other state sponsored safety bureaus. Steel used in Sico bleachers is factory tested and inspected before use. Seat and footboards are 2" thick and 10" wide.

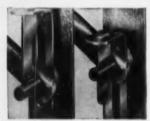
SICO SPEEDLOCK

Sico's exclusive, patented Speedlock hastens assembly and disassembly time by eliminating time-wasting nuts and bolts that often jam or rust. Simple, asfe Speedlock drops into place to provide a positive locking device that's rust-proof and practically indestructible.

For specifications and complete details write

SICO GRANDSTANDS, INC. DIVISION OF

WACO MFG. CO.



3569 WOODDALE AVENUE MINNEAPOLIS 16, MINNESOTA

Photocopy Machine SE-529 Cleaner

Insures Streak-free Reproduc-

A new processor cleaner for keeping photocopying machines free from sediment is being marketed by Hunter Photo-Copyist, Inc. Available in one and two quart sizes, this cleansing solution removes all dirt that might streak reproduction copy.

The cleanser can be poured right into the processor where it cleans the entire working unit assembly of the machine in a few minutes. The solution can be re-used up to 15 times.

HUNTER PHOTO-COPYIST, INC., 595 Spencer St., Syracuse 4, N. Y.

AMERICAN

Floor-Kings are only part of the New No. 1 Maintenance Machine line!



Now - pick the Vacuum for your job!



American Water Pick-Up Wet, 12 gal., dry, 11/4 bu.



American Industrial Vacuum Wet, 12 gal , dry, 134 bu.



American Small Vacuum Wet, 2 gal., dry, 4½ gal.

SE-440

Versatile, years ahead features . . . American Vacuums are designed to look good in an office, engineered to perform anywhere . . . respond to your slightest movement . . . powerful suction gets deep-down dirt, dries scrubbed floors automatically . . light weight, rugged . . . dozens of job-tested attachments for quick, thorough cleaning of rugs, floors and off-the-floor objects . . . American Vacuums are No. 1 in performance, all sizes for any job, any budget! Write for on-the-job demonstration, no obligation.

PERFORMANCE PROVED MAINTENANCE MACHINES . WORLD-WIDE SALES AND SERVICE

AMERICAN° RICHINI CO.

549 So. St. Clair St., Toledo 3, Ohio

MAYLINE

SE 490



Choice of colors. Write today for folder and prices.

IONIA MFG. CO. . IONIA, MICH.



METAL EDGE DRAWING BOARD

Ask about our attractive prices on school furniture and equipment: metal-edge drawing boards, art tables, drafting tables, chairs, desks, and work benches. Send us your bids.



Mayline

Invites Your

C-7702 ART TABLE



Superiority

MAYLINE COMPANY

609 No. Commerce St., Sheboygan, Wisconsin

C-77038 DRAFTING TABLE

MAYLINE _

CLASSROOM EQUIPMENT

Stacking Desk

SE-530

Accommodates Two Pupils

Designed to meet the needs of classrooms requiring more economical use of space, the functional double desk stacks out of the way to create free areas for group activities.

The two pupil desk measures 20" x 48". It may be grouped flush with other Brunswick desks to



form larger work areas for group projects.

The desk top is of natural maple plywood and is also available with plastic surface. The rugged selfsupporting frame is designed to free the legs of confining braces and gives the desk added strength and a natural resiliency.

Five heights are available.

THE BRUNSWICK-BALKE-COLLEN-DER Co., 623 S. Wabash, Chicago 5. III.

Drapery Fabrics Hand-Blocked Prints on Fiberglas

Beautiful contemporary handblocked prints are now being offered in all phases of Fiberglas material, by Williamsburg Drapery Co., Inc. This firm is also making the heaviest boucle Fiberglas now being woven. It specializes in converting and handprinting these fabrics in original modern designs, as well as designing and printing on Fiberglas for special jobs and to specifications.

Fiberglas material eliminates shrinking, stretching and mildewing. It is flameproof, washes easily, dries rapidly, does not fade, requires no pressing and is an efficient insulant against heat or cold.

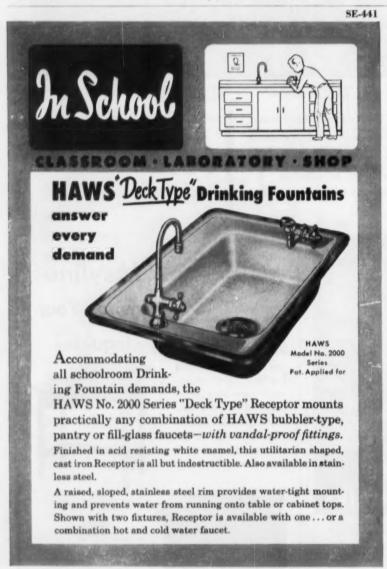
WILLIAMSBURG DRAPERY Co., INC., 819 W. Chicago Ave., Chicago 22, Ill.

Lab Furniture Line SE-532 Eliminates Custom Designing



An expanded laboratory furniture line, consisting of four and five drawer units, cupboards, sinks of various sizes, wall cases, corner units, floor cases, storage dispenser units, fume hood cabinet assemblies, refrigerators, tables, desks, chairs and stools, has been announced by Chicago Apparatus Co.

The units are made of heavy

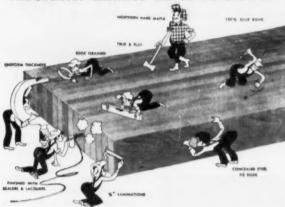


Write today for completely illustrated brochure.



TOLCO TOPS

FREQUENTLY IMITATED NEVER DUPLICATED



TOLCO - FIRST WITH ELECTRONIC GLUING

TOLCO- FIRST WITH 34" NORTHERN, HARD MAPLE

LAMINATIONS

TOLCO— A SYMBOL OF THE FINEST IN INDUSTRIAL ARTS EQUIPMENT. PURCHASED WITH PRIDE BY LEADING SCHOOLS EVERYWHERE.

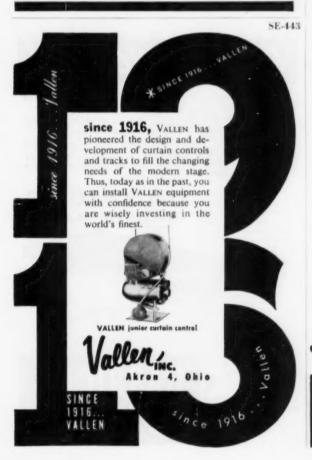


Write for Catalog and Specifications.

THE TOLERTON CO.

265 N. Freedom Ave.,

Alliance, Ohio



Your school, too, can afford the very best...

The years and years of dependable trouble-free service built into Newcomb products, together with their matchless facility for meeting all the varied requirements of sound equipment in education, make Newcomb by far your most economical choice.

Approved by leading school authorities from coast to



Variable control of tempo and pitch

TR Models provide variable speed control for special applications of sound in teaching music, dancing, gym, language, etc.

FLOATING SOUND

Exclusive feature eliminates needle skipping due to jolts and jars of dancing feet.

MODEL TR-25AM: A versatile, 25 watt, 3 speed player for all records up to 17½". Two 12" speakers. Inputs for 2 mikes, 1 phono with separate tone controls. An effective scratch suppressor. Magnetic pickup.

MODEL TR-16AM: 10 watt, 3 speed player, all records to 17¼". 12" speeker. Inputs for 1 mike, 1 phono with separate volume. Magnetic pickup. Scratch suppressor.

MODEL TR-16A: Same as above with crystal pickup, no scratch suppressor. MODEL R-16: 5 wait, 3 speed player, combines light weight with ruggedness. All records to 17¼". 10" speaker. Mike and phone inputs with separate volume. Crystal pickup.

MODEL R-12: 5 watt, high quality, 3 speed player. All records to 12". Oval 6" x 9" speaker. Crystal pickup.

MODEL RC-12: Same as above with changer.

MODEL 8-100: AM radio with unbelievable tone. Extremely sensitive. Large built-in loop. Jack for use as a funer connected to P.A. system or for headphones. 6" speaker.

100% A.C. CONSTRUCTION

All models include power transfermers for best performance and complete protection from shock hazard.



Write for catalog

NEWCOMB

HOLLYWOOD 38. CALIFORNIA



Here's a mop that snatches up dust on contact. And it's amazingly durable...lasts and lasts. Can be removed from block for washing. Handles can't break due to exclusive new, rugged "Gibraltar" brace ... BIG X comes in various widths up to 5 feet! ... It's our leader!

VICTORY Wet Mop

Time in Half

Your maintenance men will cheer you for ordering VICTORY mops. Soak up dirt and water at high speed. A heavy-duty, longwearing mop — the choice of thousands of buyers.

HOLZ-EM Applicator

BIG X

Sweep Mop

A high-speed performer. Reduces cost of applying wax, seals, varnish. More professional floor finishers use HOLZ-EMS than any other applicator.

AMERICAN STANDARD products from your regular supplier. He has them or can get them for you. If not, write us direct.

AMERICAN STANDARD MFG. COMPANY

CHARLES E. KREBS and WALTER C. KREBS 2507 SOUTH GREEN STREET • CHICAGO 8, ILLINOIS



The new unbreakable

DURO TOTE TRAY

made of U.S. Royalite-tough Plastic Product

used in SCHOOLS:

HOME ECONOMICS **Art & Science Rooms Physic & Chemistry Labs** Workshops



Stock sizes:



-Lightweight - unbreakable -durable - easy to clean available in colors—numerals can be added for identification - (hotstamped) — eliminates costly wood shelving -

Write for complete folder.

HOLLYWOOD PLASTIC ARTS.

515 East 9th St., Los Angeles 15, Cal. TUcker 8192

PUSH BUTTON CONTROL



BARRICK'S Folding Tables with "push button" operation reduce setup time.

Exclusive steel center channel construction adds strength—reduces weight.

Choice of rectangular, square or round tables with plywood, formica or blonde hard board tops in sizes and styles to your exact needs.

With Barricks patented AUTOMATIC LEG LOCK, legs lock in open positio and close at the touch of a finger—automatically.

BARRICKS **FOLDING TABLES**





SE-449

EAGLE SCHOOL

Tops In Their Class









EAGLE NO. 03162 All brass half-mortise lack for fine cab-inet work. May be ordered for either right or left hand doors.

EAGLE NO. 03202 All brass half-mortise pin tumbler drawer lack with unlimited key changes for fine cabinet work.

For one Key convenience, make certain your architect specifies Eagle high quality Cabinet Locks. Available in Keyed alike sets and Master Keyed to meet all requirements.

SPECIALISTS IN SCHOOL LOCKS FOR OVER 100 YEARS



the EAGLE LOCK CO.

Subsidiary of Bowser, Inc.
RRYVILLE, CONNECTICUT

Institutions, Industrial Plants, Schools, Camps, Mills, Hotels, Hospitals, Commissaries, Caterors, Steamships, Large Government and **Commercial Feeding Operations**

HEY ALL DEPEND AERVOIDS TO HOT FOODS





HOT

HOT

FOODS

COFFEE

SOUPS



Only AerVeiDs Have **Health Approved** Vacuum Insulation

The trend toward more and more central-ization of feed production on large feed-ing operations calls every day for more and more pariable AerVeiD Carriers to move hat feeds and liquids. AerVeiDs alone are all stainless steel combined with health-approved vacuum insulation. AerVeiDs alone provide the

combined with health-approved vacuum insulation. AerVoiDs alone provide the highest SANITARY standards. AerVoiDs alone provide the highest SANITARY standards. AerVoiDs alone previde the durability to stand up under cough usage and spread their coil ever a long period of service. AerVoiDs liquid carriers alone when used with new AerVoiD foucet "NC" or "NS" ere "in compliance" with the sonitary construction requirements (Isam 9, But, 280) of U. S. Public Health Service.

Write for illustrated Catalog Circular GA4

VACUUM CAN COMPANY

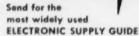
Chicage 12, III.

Vacuum Insulated Food, Soup and Coffee Carriers

SE-451

everything in electronics for the SCHOOL

1956 324-PAGE ALLIED CATALOG



Order from the one complete, dependable school supply source for all your radio, TV and electronic supply needs. We specialize in equipment for training purposes. Use our 324-page 1956 Catalog as your complete buying guide to the world's largest selections of TV, Radio and Electronic equipment. Depend on our experts for time-saving, money-saving electronic supply service and personal help. Write today for the 1956 ALLIED Catalog—your guide to everything in Electronic supplies. Order from the one complete, de-



Recorders & Accessories School Sound Systems Hi-Fi Equipment

Tools and Books

Send for FREE CATALOG **ALLIED RADIO** 100 N. Western Ave., Dept. 8-K-5 Chicago 80, Illinois

SPECIALISTS IN ELECTRONIC SUPPLY FOR SCHOOLS



CLASSROOM EQUIPMENT

gauge steel, with entire assemblies rigidly welded together into individual units which can be placed under a single continuous top surface. After fabrication, the units are run through a six-step rust-proofing process, ending with a gray Vinyl surface resistant to chemicals, abrasions, and moisture. The finish is applied through an electrostatic process which makes the paint adhere even to edges.

CHICAGO APPARATUS Co., 1735 N. Ashland Ave., Chicago, Ill.

Circular Desk

Completely New Seating Concept

SE-533

SE-452

Not only a new design, but an entirely new concept in movable classroom seating is built into the new Rota Desk offered by Beckley-Cardy Co. The desk, with its unique circular shape, combines simplicity of line with stability.

The writing top of the Rota is a generous size which accommodates either left or right-handed pupils. The curved plywood back and chair seat are shaped to correct posture standards. Tubular frame has electrically welded joints with box type

adapter to hold the writing top rigid. Books are easily available from the book rack just below the

Three sizes are available: 14, 16, and 18" seat heights.

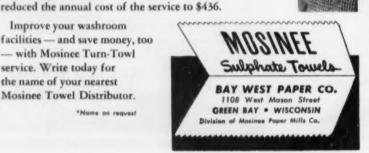
BECKLEY-CARDY Co., 1900 N. Narragansett Ave., Chicago 39. Ill.

School system cuts towel costs 2 with Mosinee Turn-Towls



Improve your washroom facilities - and save money, too - with Mosinee Turn-Towl service. Write today for the name of your nearest Mosinee Towel Distributor.

*Name on request



SE-534 Chair Trucks Speed Up Folding Chair Storage



For fast, easy storage of folding chairs, four new models of demountable chair trucks are now being offered by the Krueger Metal Products Co.

The trucks feature "chan-angle" frames which permit easier loading with chairs securely positioned into a channel-type track. This prevents them from "falling through." Lightness of weight for easier mobility is combined with heavy-duty, durable, welded steel construction so that these trucks will withstand hardest usage. Sturdy swivel and fixed type casters having 4" diameter wheels with roller bearings and rubber tires also contribute to the easier mobility. When empty, the "chanangle" frame also permits each truck to be stacked one upon the

Famous SAFWAY Offers New Low-Cost "BUDGET MASTER" BLEACHERS

• NOW YOU CAN get steel bleachers . . . designed and built in the famous SAFWAY plant . . . at a remarkably low price! The new BUDGET MASTER bleachers insure maximum safety with a welded steel angle framework. Full vision and comfort are provided for spectators.

BUDGET MASTER bleachers are available in standard units of 5 or 10 rows in height, with lengths in multiples of 6 ft. They can be used indoors or outdoors to seat any audience from 20 persons up. Mounted on skids, bleacher sections as long as 18 ft. are easily slid into position or relocated without disassembling.



Design Advantages:

"BUDGET MASTER FIVE" Comfortably seats 20 adults in each 5-row, 6-ft, length.

"BUDGET MASTER TEN" Comfortably seats 40 adults in each 10-row, 6-ft. length.

EASILY HANDLED

May be assembled at dismantled without tools by unskilled labor. Compact storage when not in use.

COMPLETELY PORTABLE

Entire bleachers or small sections can be re-used anywhere.

MAXIMUM VISION

Rise-per-row assures an unobstructed view for everyone.

MAXIMUM COMFORT

Steel frame holds wide seat planks and footboards.

GUARD RAILS AND POSTS

Furnished above 5th row. Steel tu bular or angle construction, as desired.

WRITE FOR COMPLETE INFORMATION!

Learn how BUDGET MASTER bleachers can be used to solve many seating problems at unusually low cost. Write today-give details of your requirements.



MILWAUKEE 13, WIS.

SE-455



Exclusive SUPER-BONDED 9-PLY Construction



You can see the superior difference in the surface. in the edges and inside.

NOSNHOL

world's toughest TABLE TOPS

They're SUPER-BONDED by the exclusive JOHNSON process-and that means matchiess beauty, supersmoothness, longest wear, highest sanitation and complete protection against marring. Widest selection of edging styles and plastic materials. Write for the full details that prove JOHNSON superiority.



CATALOG

JOHNSON PLASTIC TOPS, INC.

69 North Street, Dept. G-105 Elgin, Illinois





WORN STAIRS

ARE YOUR DANGER

SPOT

Make Them Safe With Stairmaster Safety Treads

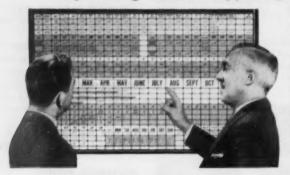
Prevent accidents to children by the installation of Wooster's new oluminum Stairmaster Safety Treads over warn stairs. Installed in one day, usually without interrupting traffic, these durable metal treads minimize stair accidents and stop costly stairway mainte-nance. Used by hundreds of leading school systems. Send your overall stair measurements for a quotation.

FREE! Brochure shows how to make stairs and walkways safe.

9	WOOSTER PRODUCTS, INC., Wooster, Ohio
*	Please send Literature on Stairmaster Safety Treads
E	Name
,	School
1	Address

"Step Ahead with Wooster Safety Treads"

You Get Things Done Better By Seeing What's Happening



BOARDMASTER VISUAL CONTROL

- * Gives Graphic Picture of Your Operations in Color.
- * Facts at a Glance Saves Time and Prevents Errors.
- A Simple, Flexible Tool-Easily Adapted to Your Needs.
- * Easy to Use. Type or Write on Cards, Snap on Board.
- * Ideal for Scheduling, Traffic, Maintenance, Inventory, Etc.
- & Compact, Attractive, Made of Metal. 60,000 in Use.

Complete Price \$4950 Including Cards



24-Page ILLUSTRATED BOOKLET S-10 Without Obligation

GRAPHIC SYSTEMS, 55 West 42nd St., New York 36, N.Y.



Not Just Strength ...

Minimum weight (for long-haul strength) Minimum weight (for long-haul strength) . . . no knee-interferance at either END or SIDES . . folds and unfolds in a jiffy . . . most efficient automatic locking device . . . stack and store in minimum space. Just a few advantages of tri-balance design combined with Metwood-Hanover's traditional craftsmanship, Professional buyers call it . . . "The Table with 9 Lives".





STEEL LIBRARY



DELUXE METAL FURNITURE CO. WARREN, PENNSYLVANIA

A DIV. OF ROYAL METAL MFG., CO.

GIVE YOUR JANITORS THE BEST!

JANITOR SERVICE WAGONS

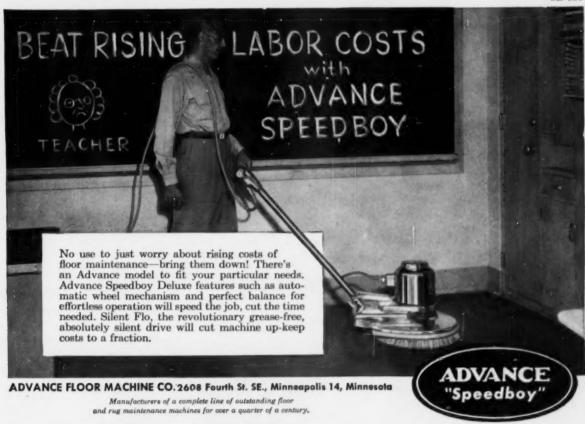
Sanitary-Efficient! Roll Easily-Won't Scar or Mar Floors.

CANVAS BAGS . Replaceable—Washable

The Shamrock No. 75 Janitor Service Wagon is lightweight and labor-saving . . . helps

and labor-saving . . . helps your janitors cover more area in less time, Sturdy steel frame collapses into small space. Equipped with two 2-inch hard composition casters, and white canvas bag. Wagon measures 20" x 19" x 43" high when bag is open. Grommeted bag is washable; drawstring closure keeps contents secure when bag is taken from frame. Extra bags, white or O.D., are available. Famous Shamrock Canvas Products are used the world open. Write for Literature and Prices! world over! . . . Write for Literature and Prices!

Mfd. by MEESE, INC., Madison, Ind.





CLASSROOM EQUIPMENT

other, and stored in a small space.

KRUEGER METAL PRODUCTS Co.,

Green Bay, Wis.

Typing Table SE-535 Designed to Resist Vibration

Engineered to resist the vibration of typewriters and business machines, the new tubular steel Typing Table No. 2228 is made in three heights.



 $26\frac{1}{2}$ ", 28", and 30". The table is made of $1\frac{1}{8}$ " x 16 gauge tubular

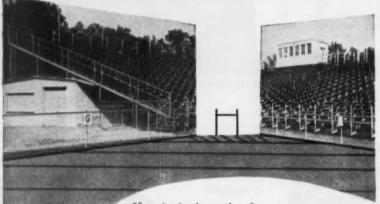
steel, electrically welded into a onepiece frame. Screw jack rubber nose glides are incorporated which permit 1" additional height. Although the standard table top measures 22" x 28", other sizes are available.

Another feature of the table is its 7" x 13" x 17" steel book holder, made of expanded steel mesh, rubber mounted to frame without the use of either screws or bolts which further cuts down any vibration noises.

AJUSTO EQUIPMENT Co., 2144 Madison Ave., Toledo, Ohio.

SE-463

New perspective in PERMANENT STANDS



If you're in the market for permanent seating, the factors of safety, durability, comfort and visibility—as well as price—should be of important consideration. But, don't overlook the factor of maintenance. Keeping structural steel free from rust is a time consuming, costly proposition.

That's why PLAYTIME licks the rust bugaboo at manufacturing source. Following fabrication, each welded steel panel is Hot-Dip Galvanized under a rigidly controlled process. This provides a thick coating of rust preventative zinc that guards against deterioration of steel for years and years—eliminates costly scraping and painting operations.

It will more than pay you to investigate PLAYTIME's new perspective in permanent stands—truly the pride of any athletic field.



Send for FREE descriptive literature and investment analysis information. SE-536

Fireproof Diffusion Cloth Is Suitable for Draperies

A new Infinity Fireproof Diffusion Cloth is coming off the looms in blue and white. It can be washed or cleaned by any method with any soap, detergent or chemical.

The material is a man-made synthetic which is not only inherently fireproof but does not shrink or stretch and is exceptionally fade resistant. Six other colors and metallic are available.

EDWIN RAPHAEL Co., INC., Holland, Mich.

Art Easel

SE-537

Can Be Used on Field Trips

Lightweight and compact, the Safe-Lock Instant Art Easel #711 can be set up anywhere. The telescoping legs permit use on any terrain. These large diameter legs are precision machined of hand polished aluminum for maximum tubing rigidity. Weighs less than 3½ lbs.

The easel holds any canvas up to 30" x 40". The canvas cannot jar loose from the easel because of a double braced canvas support and rubber tipped lock screw. Canvas supports lock instantly at any height by means of large aluminum lock knobs. The paint box support is made of extra-rigid solid aluminum.

This easel folds compactly.

ARSCO AMERICAN, INC., 3308 Edson Ave., New York 69, N. Y.

SCHOOL EQUIPMENT INDEX—OCTOBER, 1955

This index covers products and services referred to in both advertisements and editorial reviews in this issue. To find a particular advertisement or editorial listing, consult the key (SE number) which precedes the listing, and which will also be found above the advertisement or listing in the body of the magazine.

If further information concerning any of these products is desired, it will be sent without charge or obligation. Simply circle the identifying numbers on the back of the business reply eard below and mail it to us.

ADVERTISED PRODUCTS

- Formica Desk Tops
- Johnson Temperature Control System 302
- **Nesbitt Thermovent**
- Powers Temperature Regulator Fort Howard Paper Towels
- 305
- St. Regis Panelyte 306
- 307 Heinz Soups
- Cretors Popcorn Machine
- Benjamin Porcenell Chalkboards Jennison-Wright Kreelite Flooring 300 310
- American School and University
- West Wescodyne Germicide
- "As I See II" by Walter D. Cocking Keyes Molded Plastic Tableware
- 314
- Pittsburgh Color Dynamics 315
- Rohm & Hoos Plexigl 316 American Photocopy Copying Machines
- 318 Delta Drill Press
- Detroit Steel Fenestra Traffer-Acquistical
- **Building Panels**
- American Seating Universal Desks Adams & Westlake Aluminum Reversible Windows
- Brever Floor Machines
- Desk Tops Plustic Tops for Desks and
- The Grolier Society 1955 Book of Knowl-324
- edge Wear-Ever Aluminum Cooking Utensils
- Strong Electric Spotlights
 Westmoreland Flexible Classroom Furni-327
- Mississippi Translucent, Diffusing Glass
- 329
- Mississippi Transucent, Orthosing Glass
 NEMA Electric Ranges
 Trane Heating and Ventilating Products
 Medart Steel Lackers
 Nesbitt Series Wind-O-Line-System 330
- 331
- 332
- RCA Sight and Sound Systems
 Westinghouse Modern Electrical Practices 334
- Chicago Hardware Foundry Electric Dry-
- Page Chain Link Fence **Ditto Duplicators** 337
- Libbey-Owens-Ford Tuf-Flex Plate Glass 338
- 339
- Arco Optonic System Norris Milk Dispensers Hussey "Roll-Out" Gym Seats
- Dudley Master-Keyed Locker Locks Victor 16mm Sound Projector Luther O. Draper Shade Units
- 343
- Johns-Manville Fibretone Acoustical Units
- Sani-Mist Modern Foot Sanitation
- Ajusto Automatically Adjustable Chairs and Stools
- Royal Typewriters for Schools
- Acme Rustoscale Boiler Water Treatment
- 350 Cyclone Fence
- Pittsburgh Corning Glass Blocks 351
- Joseph Goder Incinerators 352 353 Sico Tip-Top Table
- 354 The 1955 Encyclopedia Americana
- 355 SVE Filmstrip-Projector Flans Roiscreen Pella Wood Folding Doors
- 356 Church Plastic Wall Tile 357
- Schieber Folding Tables & Benches Loxit Chalkboard System
- 350 Chicago Roller Skates 360
- Universal Roll-A-Way Bleachers

- Georges Mon Wringers Leonard Peterson Laboratory, Home Mak-ing and Art Room Furniture Manley School Refreshment Stand Equip-

- 365 Shwayder Bros. Samsonite Classroom
- Furniture Walter G. Legge Slip-Resistant Floor Polish
- 367
- Heyer Spirit Duplicators Haldeman-Homme Folding Tables and 368
- Curtiss-Wright Precision Instruments
- 370
- Griggs School Furniture Ward Safeguard School Bus Executone School Intercom Systems
- 373
- Metalab Laboratory Equipment
 Pratt & Lambert Lyt-All Flowing Flat 375 Paint

- 378
- Paint
 Clarin Folding Chairs
 Bradley Washfountains
 Hammond Organs for School
 American Optical Opaque Projector
 Ford School Bus Safety Chasis
 Cowen Light Metal Products
 Leavitt Telescoping Bleachers
 Celotex Sound Conditioning 379 380
- 382
- 383
- Conn Band Instruments
 Richards-Wilcox FoldeR-Way Partitions 384
- 386
- Vogel-Peterson Coat and Hat Racks Snyder Tank Grandstands and Bleachers 387
- Owens-Illinois Toplite Roof Panals 388
- Presto Recording Equipment and Discs
- Wenger Risers Mastic Tile Corporation Matica Asphalt 391
- Fleetwood Flexible Furniture
- 793
- 394
- Huntington Floor Maintenance Methods Sanymetal Toilet Compartments United States Plywood Weldwood Chalk-395
- Smitheraft School Lighting Units
- American City Bureau Fund-Raising 397
- 398
- Viewlex Projectors
 Dictophone Business Practice Course 399
- Baker-Roos Scaffolds 401
- Sexauer Screw and Washer Combination for Faucata

- 402 Audio Equipment Electronic Magaphane
 403 Equipto Clothes Storage Lockers
 404 Hillyard Chemical Floor Maintenance
 405 Duke Thurmaduke Waterless Foo
- Warmer Mitchell Felding Tobles and Stands Multi-Clean Floor Maintenance Equipment Simoniz Floor Wax Holcomb & Hoke Feldoor 407
- 408
- 409 410
- 411
- 412
- Finnell System Sanax Wax Cleaner Pennsylvania Slate Chalkboards Wakefield Beta Recessed Luminaires Colonial Sink-Work-Counter and Storage 413 Units
- 414 Kuhne School Furniture
- 415
- International School Seating National Multi-purpose School Furniture Kowaunee Educational Laboratory Plan-416
- 417
- 418
- ning Aids
 Berlin Ez-A-Way Bleachers
 American Bitumuls & Asphalt Laykold
 Tennis Courts 419
- 420
- 421
- 422
- Tennis Cours Sylvania Modern School Lighting Beckley-Cardy Rota Desk Brillo Floar Pads Master Stanless Steel Lock Fairbanks-Morse Power Generators Book-423 424
- 425 **Tennant Floor Machine** 426
- Concession Supply Counter Model Papper Farquhar Transparent Globes Straubel Roll Tissue and Towels 427
- 429
- Michaels Display Cases Maxim Snow Throwers 430 Colonial Engineering Clay Carts and Art 431
- Counters
- 432 **Pabco Mastipave Flooring** Spencer Vacuslot Plates for Map Clean-433
- lig west Folding Tobles
 Claridge Chalkboards and Bulletin Boards
 National Lock Master Charts
 Sico Bleacher Installations
- 435 436

FIRST CLASS PERMIT NO. 280 SEC. 510 P. L & R. NEW YORK, N.Y.

BUSINESS REPLY CARD No Postago Stamp Homesory If Malled in the United States

2 CENTS POSTAGE WILL BE PAID BY

THE SCHOOL EXECUTIVE **470 FOURTH AVENUE** NEW YORK 14, N. Y.



SE SE SE 485 Rowles Space-Master Desk & Chair Unit 486 Dependable Adjustable Stools 487 Photo Materials Cutting Board 524 Multi-Clean Color Finishes 525 G. W. Galloway Hydraulic Lift 526 Vestal Floor Machine American Floor Maintenance Machines American Floer Maintenance Machines Ionia "Safe-Tee" Folding Chairs Mayline School Furniture and Equipment Haws "Dack Type" Drinking Fountains Tolerton Toleo Tops Vallen Curtain Centrals and Tracks Newcomb Audie Products
American Standard Floor Maps Hollywood Plastic Arts Dure Tole Tray Barricks Folding Tables
Craftool Ceramic Equipment and Tools Catalog 439 440 The Morgan Company Line-O-Scribe Recrection Basketball Equipment Universal Galvanized Bleachers 441 488 442 489 490 443 ADMINISTRATION 444 Heat-Timer Varivalve Incinerator Products School Incinerator Grogg Bros. Folding Tables and Benches 445 492 527 Bohn Spirit Duplicator 528 Thomas Collating Machines 446 493 Daintes Toys Counting Frame
Apsco Pencil Shorpeners
White Mopmaster Outfits
Floor Machinery Maintenance Machines 494 529 Hunter Photocopy Machine Cleaner 448 Catalog Eagle Lock School Sets Vacuum Can Hot Food, Soup and Coffee 449 497 Waterlax Moisture Control CLASSROOM EQUIPMENT 450 498 Carriers West Disinfecting Company Westroll Carriers
Allied Radio 1956 Catalog
Bay West Masines Turn Towels
Safvay "Budget Master" Bleachers
Johnson Table Taps
Waaster Safety Stalt Treads
Graphic Systems Boardmaster Visual Con-499 451 Towals 504 Hampden Auditorium Chairs 530 Brunswick-Balke-Collender Stacking Desk 500 General Binding "Manual of Modern Plastic and Louse-Leaf Binding" 500A American Optical Color Blindness Test 452 Brunswick-Balke-Collender Stacking Desk Williamsburg Drapery Fabrics Chicaga Apparatus Lab Furniture Line Beckley-Cardy Circular Desk Krueger Chair Trucks Ajusta Typing Table Edwin Raphael Fireproof Diffusion Cloth Arsco American Art Easel 453 531 454 533 456 534 NEW PRODUCT NEWS trol Metwood Hanover Felding Tables
Deluxe Steel Library Shelving
Meess Janitor Service Wagons
Advance "Speedboy" Floor Maintenance 535 457 BUILDING PRODUCTS 458 501 Detroit Steel Troffer Acoustic System
505 Surfacing Coatings Building Material
506 Accesso Systems Suspension System
507 Mammoth Furnace Space Heaters
508 Smithcraft Recessed Lighting Unit
509 Modine Convector Radiation
510 Wooster Preducts Safety Stair Treads
511 Burgess-Manning Radiant Celling
512 Winnen Incinerator 460 Machine TEACHING MATERIALS 461 Noubauer Gym Basket Rack Neubauer Gym Basket Rack Montgomery Program Clocks Playtime Permanent Stands Haag Spin Master Cram Globes, Maps, Charts and Atlases Hild Wet and Dry Vacuum Rauland-Borg Intercommunication System Tu-Way Carridor Duster Automatic Devices Curtain Controls and Equipment 462 538 Califone Hi-Fi Phonograph 539 Tigrett Industries Coloring Toy 540 Potters' Wheel Enamel for Copper 541 RCA Electronics Trainers 463 444 465 467 542 Alvin Pocket Slide Rule 448 469 FOOD SERVICE Equipment Hotel Raleigh AUDIO-VISUAL AIDS 502 Dixie Cup Paper Food Service 513 Frigid Fruit Apple Vendor 514 Midland Plastic Dinnerware 601 Association Films New Film Catalog 602 SVE Holiday Filmstrips and Slidesets 603 Eastman Kodak Data Book 604 Sterling Educational Films New 16mm 471 C. Howard Hunt Baston Pencil Sharpen-472 Monroe Folding Banquet Tables and 515 Universal Vegetable Peeler 516 Schieber Table-Bench Unit Detroit Lectern Adjustable Lectern 473 Schieber Table-Bench Unit
Oakite Dishwashing Detergent
Manley Popcorn-Soft Drink Machine
Bevoc Milk Cooler
Wyandotte Rinse Booster
Universal Dishwashing Spray-Type Dish-Hamilton Laboratory Equipment Science Kit for Science Teaching 517 474 Jam Handy Folk-Tale Filmstrips British Information Services Churchill 605 475 Burke-Dykins Bicycle Racks Neumade All Steel Combination Storage 606 519 476 Film 477 520 47B 521 washer Units MANUFACTURERS' CATALOGS Hampdon Folding Chair Kant-Slom Hydraulis Door Check Mackin Visual Education Blinds 479 MAINTENANCE 481 607 Nuclear Instrument and Chemical Radia-Nuctear Instrument and Chemical Radia-tion Measuring Equipment Catalog Cold Spring Granite Brochure Mosaic Tile Swimming Pool Catalog E. F. Hauserman School Interiors Booklet Decar Plastic Laminates Catalog American-Olean Booklet on Tile Dukane Sound Slide Projection Equip-Everett Plano Nutting Chair Trucks American-Olean Tile Company Ceramic 482 503 Tora Power Handle 522 Hypro Engineering Lawn Sprinkler 523 Bil-Jax Beam Scaffold 483 Tile Booklet 610 611 612 ment Record 614 American Dispenser Scap Dispenser Catalog
615 American LaFrance Fire Protection Systems Booklets
616 Royal Electric Typewriter Booklets
617 Equipto Lockers Brochure
618 Senaca Products Fibre Forms Catalog
619 Leeds & Northrup Portable Potentions THE SCHOOL EXECUTIVE, 470 Fourth Ave., New York 16, N. Y. October, 1955 Places ask the manufactures, indicated by the numbers I have circled, to send further lisecuture and information provided there is no change or obligation. 301 302 308 304 305 306 307 308 308 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 328 328 330 331 332 333 334 335 336 336 337 338 339 340 341 342 343 344 345 246 247 348 249 350 351 352 353 354 356 357 358 359 300 361 362 363 364 365 366 367 358 368 369 370 371 372 373 375 376 377 378 379 380 381 382 333 384 355 366 387 358 369 300 391 362 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 422 424 425 426 427 428 428 429 430 431 432 433 434 435 438 437 438 439 440 441 442 443 444 445 446 447 446 440 450 451 452 453 454 455 456 457 468 459 480 481 482 483 484 485 485 485 487 488 489 490 491 492 492 492 494 495 496 497 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 485 485 487 488 489 490 491 492 492 494 495 496 497 497 497 497 497 475 476 477 478 479 480 481 482 483 481 485 485 485 487 488 489 490 491 492 492 494 495 496 497 497 497 497 497 497 478 479 470 477 478 479 480 481 482 483 485 485 485 485 880 887 588 887 588 589 540 541 542 601 602 603 604 605 606 607 608 600 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 625 eters Data Sheet 520 Allied 1956 Radio Catalog **NEW TEXTROOKS** 621 Ginn and Company Spanish Text 622 Science Research Guidance Program Booklet McGraw-Hill Typewriting Speed Tests Book
624 American Heritage Books
625 McGraw-Hill Adding Machine Workbook
626 American Technical Farm Shop Skills
626 Book Also send linesture on ... NAME THE OWNER OF THE OWNER, OWNER,

DESCRIPTION OF THE PARTY OF THE

ADDRESS

CTY

ZONE

STATE



Although specifically designed for metal spinning, the SS-15 SPIN MASTER is ideal for wood turning, thereby making it the perfect choice for school shops operating on a limited budget. This 15-inch lathe offers simplified modern design, infinitely variable speed drive, stop-start safety bar and the versatile 11/2"-8 thread nose spindle.

HAAG MACHINE CO.. INC

200 ROYAL AVE., HAWTHORNE, N. J.

SE-465



Attentive Pupils — Faster Progress

For new and up-to-date teaching aids, you can depend on Cram's Globes, Maps, Charts and Atlases. Edited to fit the mental maturity of the different grade level of pupils. MARK-ON RUB-OFF surface. Many other exclusive features.

Let the Cram man call and make a FREE map and globe survey of your entire school. For the latest and complete line of Teaching Aids, send for Cat. 88-B.



Members of the National School Service Institute

GEORGE F. CRAM CO. INC.

730 E. Washington St. Indianapolis 7, Ind.

HILD's new Wet and Dry Vacuum fits any 55 gallon drum on hand Hospital quiet



PORTABLE! 4 wheel dolly available for easy moving.

The new HILD giant Industrial Vacuum Cleaner is equipped with a powerful ONE HP motor for Wet or Dry Pickup. Available with 2" intake diameter hose for picking up bulky items such as lightweight waste material, shavings, rags, wood chips, metal filings, etc., or the 11/2" intake diameter hose for picking up dirt, dust or liquids. Lightweight removable unit permits easy transfer from full drum to empty drum in seconds. 4 wheel dolly made of steel is available for easy moving of drum and unit. Vacuum head and dolly available separately

HILD FLOOR MACHINE CO.

740 W. Washington Blvd., Chicago 6, III., U.S.A. Factory Branches: 250 E. 43rd. St., New York 17, N.Y. 4271 West Third Street * Los Angeles 5, California



HILD FLOOR MACHINE CO., 740 W. Washington Bivd., Chie

Gentlemen: Please send FREE details on the Wet and Dry Vacuum Cleaner with transferable vacuum head.

NAME		
COMPANY		
ADDRESS		

ALL-NEW FOR MODERN SCHOOL ADMINISTRATION



Rauland LOW COST

Intercommunication System 2-Way Communication and Program Facilities

* Fer up to 48 rooms

* "All Call" feature

Volume level indicator * Remote mike operation * Matching radio and phonograph available

This compact, precision-built system is ideal for low-cost 2-way communication facilities to provide efficient supervision of all school activities. Announcements, speeches and voice messages can be made by microphone to any or all rooms (up to a total of 48); speech origination from any room to the central cabinet is available. Includes "All-Call" feature for simple instantaneous operation. Incorporates 30-watt amplifier with input connections for remote microphone, radio, phonograph and tape recorder. Housed in a compact, attractive all-steel blue-gray cabinet suitable for desk or table. When combined with the suitable for desk or table. When combined with the suitable centralized school sound system with unusual flexibility and utility is achieved at remarkably low cost, within the budget means of even the smallest school.

MATCHING \$404 RADIO & PHONOGRAPH

Combines perfectly with the 8224 system. Provides complete facilities for the



H

complete facilities for the distribution and control of radio and phonograph programs. Includes precision-built FM-AM radio tuner and high quality 3-speed record player which plays all records up to 12' at 33½, 45 and 78 rpm speeds. The matching S404 and S224 units may be stacked compactly to conserve desk space. Together, they form a complete and versatile sound system offering both communication and program facilities at the most moderate cost.

WRITE FOR COMPLETE DETAILED DESCRIPTION

RAULAND-BORG CORPORATION

Raulan 3515-E Send ful	W	le de	si te	1	A	d	d	1	R/	M	JL	S	ŧ.	,	C			- 7				-,				el	e	m	8.	. 1	w	'e	,	h	a ·	v
				-	_	-																	-													
Nome																																				
School		0	0 0	0	0			0		0	0 4	0.0		0	0	0 1	 ۰	0	0 0	0	0	0 1	. 0	0	9		0 0	9	0	0 1	0		0	0	0 -	0
Address.		*							×	×	* 4				,	8.1						*	. ,	. 8.							. *	. 8	×		*	*
City																				9																



SE-469





Joseph Massaglia, Jr., Pres. John F. Schlotterbeck, Mar.

Headquarters for tourists and business people. Raleigh Room renowned for fine cuisine . . . Pall Mall Room for Banquets. Special Courtesies to Honeymooners. 500 Air-Cooled Rooms from \$6 single, \$9 double.

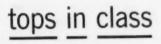
Other Massaglia Hotels

- Hotel MIRAMAR, SANTA MONICA, Calif.
- . Hotel SENATOR, SACRAMENTO, Calif.
- Hotel SINTON, CINCINNATI, Ohio
- Hotel SHERWYN,
 PITTSBURGH, Pa.
- Hotel EL RANCHO,
 GALLUP, N.M.
- Hotel BOND,
 HARTFORD, Conn.

. Hotel PARK LANE, DENVER, Colo.

WORLD-FAMED HOTELS - TELETYPE SERVICE - FAMILY PLAN

SE-471



BOSTON KS

efficient-30 hard-steel, deep-milled cutting edges cut swiftly and neatly—BOSTON pencil stop prevents waste

fugged—strong, die-cast frame and steel rack—nickel-plated steel receptacle

adaptable-snap guide takes 8 pencil sizes

dependable-guaranteed 1 year-even against



specify BOSTON



C. HOWARD HUNT PEN CO.

Also mfrs. of SPEEDBALL pens and products

Mowroe FOLDING BANQUE



NOW, Monroe Folding Banquet Tables, at no extra cost, are offered with completely finished tops, highly resistant to most serving hazards. May be USED WITHOUT TABLE CLOTHS, if desired. Also available in Formica and Ornacel special color and pattern types. Write for catalog with direct factory prices and discounts to religious and educational institutions, clubs, lodges, etc.

MONROE TRUCKS For Folding Tables and Chairs

Transport and store your folding tables and chairs the easy, modern way on MONROE Trucks. Construction of Transport-Storage Trucks permits maneuverability in limited space. See Catalog.



THE Monroe 66 CHURCH ST.

Chair Truck TSC



Company COLFAX, IOWA

SE-473

Prominent schools everywhere* are installing this modern auditorium fixture . . .

The HI-LO Adjustable Lectern

Electrically Operated Push-button Control Quiet, Dependable **Performance**



Modernization programs in schools all over the country include the addition of this new, fully automatic lectern. Adjusts instantly to any height, through a range of 8 inches, at the touch of a push-button control. Available in a variety of finishes, to match any auditorium. Prices from \$440. Write for literature, specifications.

Names on request

DETROIT LECTERN CO., INC.

13336 Kercheval Ave., Detroit 15, Mich.

Hi-Fi Phonograph Be-538 Headphones Permit Individual Listening

The Listening Corner is a hi-fidelity phonograph equipped with eight input jacks which, when inserted, cut off the 12" speaker and make possible concentrated listening without disturbing the other children. The students can be briefed beforehand on the music or stories they will hear. If the music is to be played for



all the children, all that is necessary is to pull out the main jack and the sound travels through the large speaker.

With this teaching tool, music can

go on all day without having to set aside a particular time. In addition, the microphone input turns the unit into a P.A. system for 1000 people, or makes possible calls for square dancing. The variable speed makes a slower tempo possible for teaching rhythms or dancing. The audio range makes possible the playing of hi-fi records with excellent reproduction for music appreciation or for background music for PTA gatherings.

CALIFONE CORP., 1041 N. Sycamore Ave., Hollywood, Calif.

Coloring Toy

SE-539

Many Hours of Fun for Kindergartners



The Coloring Toy has been designed by Charles Eames for Tigrett Industries. It contains 16 crayons and sturdy printed die-cut cards which can be punched out to form castle walls, puppets, or whatever a child desires. Fasteners packed with the toy permit the pieces to be joined together to make wiggling puppets or hinged walls.

After the pieces have been colored, the assembled toys make for many hours of playing fun.

TIGRETT INDUSTRIES, 66 E. Walton Place, Chicago 11, Ill.

Enamel for Copper SE-540 Creates Unusual Effects

A new type of separation enamel can be obtained through The Potters' Wheel, Inc. The enamel is black when applied and burns out entirely during the firing. It creates a "river" of separation in the layer of enamel underneath it. Application is by brush, by spattering, through stencils, etc.

The procedure is as follows: a



Hamilton All-Purpose equipment transforms any classroom into an efficient area for science instruction.

Instructors' desks, student tables, storage cases, wall counters . . . all varying in size and accessories according to space available, students to be accommodated, and work to be done.

Multi-layered 1½"-thick HAMILCORE top is a special feature—its high-bake black finish so resistant to solvents, salts, acids, and alkalis as to be near-indestructible. All-Purpose construction is choice Northern Hardwood in Blonde finish, with modern flush-overlap design. Substantial quantities of all items are in stock.

For planning help from a Hamilton Field Engineer, or our plan-it-yourself All-Purpose Catalog No. 215, write without obligation—



HAMILTON MANUFACTURING COMPANY . Two Rivers, Wisconsin

TEACH SCIENCE



SAVES TIME-EFFORT-MONEY

- contains over 80 pieces of top quality apparatus for elementary science.
- 14 units of experiments clearly explained in easy-to-use Teacher's Manual.
- e correlates with any text.
- compact . . . comes in sturdy, easily portable ply-wood chest.
- · replacement service
- recommended . . by science text publishers; used . . by ever 60,000 schools in every state.

\$36.00 FOB Tonawanda

"SCIENCE KIT"

BOX 69

Tonawanda, N. Y.

CUT STRAW COSTS HALF ... HYGIENICALLY!



LOOK AT ALL THE MIPE **EXCLUSIVE** FEATURES!

- ★ DUPLEX holds full carton of 61/5" Milk, 81/5" Standard or 81/5" Jumbo unwrapped straws.
- * Full carton of straws completely empties into dispenser without straws being handled.
- * DUPLEX dispenses one-straw-at-a-time, from either side of the dispenser. Actually doing the work of two dispensers.
- * DUPLEX "magic-touch" dispensing principle eliminates jamming, makes straw dispensing fast, accurate, and so easy, a child of two can dispense straws at will.

 DUPLEX Straw Dispensers are made of gleaming stainless steel, including ends.
- ★ DUPLEX Straw Dispensers are hygiene approved. Easy to keep sonitary. Disassembles in seconds. Only six interchangeable parts, all precision fit.
 ★ DUPLEX Straw Dispensers cut straw costs in half. Eliminate wrapper annoyance.
- ★ Made in two moders. One for use with 6½" Milk and 8½" Standard straws, the other for 8½" Jumbo Straws.
- ★ DUPLEX weighs less than two pounds. Easy to handle from place to place.
- * DUPLEX Strow Dispensers are UNCONDITIONALLY GUARANTEED.
- * No other STRAW DISPENSER can make such claims . . . and back them up 100%.

If not available at your Jobber . . . write TOBAY for free literature. Dept. SX-2

DUPLEX STRAW DISPENSER CO

HEAVY DUTY BICYCLE RACKS

AT LOW COST



- · All-Weather Galvanized Pipe Construction
- Sizes from 2-20 Feet
- Capacity 4-40 Bicycles
- · Movable, or for permanent installation in concrete

Manufacturers' Representatives inquiries invited

Write for illustrated price list

PROTECTS

YOUR

FILM!

BURKE-DYKINS, INC.

602 Young St., Tonawonda, N. Y.

leumade

SE-478 ALL STEEL COMBINATION STORAGE UNITS

YOU CAN BE SURE that your stored films will be safe from dust, heat or dryness with NEUMADE COMBINATION STORAGE UNITS!



Madel MM-119-A practical stor-age cabinet for the varied film library. Holds 400, 800, 1200, 1600 ft. reels; 100 filmstrip can plus utility drawer in base. Over-all size: 30" wide, 70" high, 16" deep. Over 50 models to choose from. Write for free catalog.

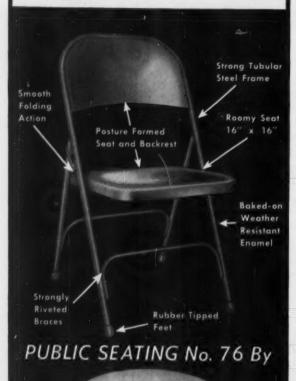
PRODUCTS CORPORATION

250 West 57th Street New York 19, New York



YOU CAN MORE

BUT YOU CAN'T BUY A BETTER CHAIR FOR SEATING



Here's the best seating chair buy available anywhere! This number by Hampden, famous maker of folding furniture, is specifically intended for public seating. Built for a lifetime of service, extremely comfortable and handsomely designed. Ganging fixtures easily adapted.

Check the features pointed out above and compare this chair with any other in the country. The price invites comparison too!

Write ... for full specifications and prices of this and other public seating chairs to . . .





Stop Slamming Doors!

Door Che

Large or Small Doors, Screen Closes Doors and Gates-Easily, Gently,

Slamming . . . Banging . Stops Broken Door Glass . . . Insects . . . Profts Heat Loss . . . Drafts . . . Heat Loss

KANT-SLAM closes doors with efficiency of human hand. Hydraulic action — NOT an air check—piston works in ail. 3 years trouble-free service guaranteed. Price about half of other hydraulic controls.

Works any place along hinge side of door— top, middle or bottom—either right or left hand doors. KANT-SLAM is completely selfcontained—doors and hinges are absolutely free of any strain or pressure. Holds door open when past 90 degrees.

Only one size Check required — three sizes easily detachable springs available for various size doors. Simple screw adjustment for closing speed.

Order on 30 Days FREE TRIAL at \$9.95 de-livered — or Write for Complete Details,

KANT-SLAM DOOR CHECK CO.

485 W. Spring St.

ATTRACTIVE, DARK BRONZE, METALLIC LACQUER FINISH-HAMMERED BRONZE EFFECT.

Used by Hundreds of Nationally-Known Firms

Oak Ridge Atomic Energy Plant, University of North Carolina, Great A. & P. Tea Co., Bethlehem Steel Co., General Electric Co., Rutgers University, Northrup Aircraft, Fuller Brush Co., Carnation Co., Shell Oil Co., Kraft Foods,

SE-481

controlled darkness

For Every Type of Projection . . .

MOVIE, SLIDE OR OPAQUE

MACKIN VISUAL

EDUCATION

Eliminates Double Equipment and Maintenance
One Unit gives complete light control of sun and glare and still of
for visual education work. It does the whole job and costs less.

Chain Operated
No cords to wear o out and require replacement.

No cords to wear our and require.

Removable Slats
Just lift them out, clean and slip back in. No complicated unstringing and restringing as ordinary blinds require.

Controlled Travel
Slats travel up or down within a special molded METAL CHANNEL.
This controlled travel feature prevents blind from blowing and banging in the wind.

Light Control Shields

Light Control Shields
A clearly-designed device which presses the blinds' slats tightly against
the channels, Mackin's Light Control Shields are simple triangular strips
mounted vertically—one at each side of the blind.
Mackin Visual Education Blinds have been accepted and installed in
hundreds of classrooms across the nation.
GET THE FACTS ... NOW! Write today for complete details and
catalog on ROOM DARKENING!

MACKIN VENETIAN BLIND CO. Momence, Illinois

Use or abuse...EVERETT STANDS UP



From its "full cast" plate and hard maple pin plank to its double veneered case, every detail of this special piano is engineered for long, hard service. But that's not all. What is even more important is the beautiful tone of an Everett Style 10. Extra string length needed for full, resonant tone is provided by the 44-inch height. Full-size action and carefully selected 12 pound hammers permit unexcelled playing ease. Before you choose any school piano, investigate the Everett Style 10 — choice of hundreds of schools. And . . . one of the lowest-priced.

Everett Piano Co., Div. of Meridan Corp., South Haven 9, Mich.

FACTS!

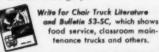
A copy of "Report 10," a factual rundown on school piano specifications, is yours on request.



America's most popular school plano!



value. Nutting's high grade materials and fine workmanship give you year in, year out economy. Double Decke Ample size steel frames and ball bearing rubber tired wheels of adequate diameter insure longer life and easiest operation under heavy loads. Finished in attractive metallic grey.



ts 191 NUTTING TRUCK & CASTER CO. 2606 East Division St. . Fortbault, Minn.





shows many full color photos of outstanding schools, and gives numerous planning suggestions and tile descriptions,

Send for your free copy today!

American-Olean Tile Company

1127 Cannon Avenue Please send me a free	
Name	
Firm	
Address	
City	ZoneState

TEACHING MATERIALS

coating of flux is first fired to the copper. The second firing consists of a layer of transparent enamel, preferably dark. The separation enamel is applied last. It is allowed to dry or is carefully force-dried in the hot kiln. The piece is then fired to normal temperature. The separation effect is apparent after withdrawal from the kiln.



POTTERS' WHEEL, 11447 Dept. 72, Euclid Ave., Cleveland 6, Ohio.

Electronics Trainers SE-541 For Demonstrating Circuitry

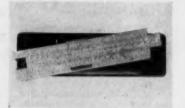


The new RCA Dynamic Electronics Trainers provide equipment for classroom use-RCA Model 161 Instructors Demonstrator, (illustrated) and for student practice-RCA Model 121 Student Laboratory Set.

The Model 161 contains 35 chassis type panels, each a different circuit. All circuits may be demonstrated individually, or in chain operation, illustrating principles involved in AM radio, FM radio, and special applications of circuits in radar, television. test equipment, etc. The panels are easily installed, with all connections automatic upon installation. Components plug-in adjacent to their respective symbols. A combination display rack and storage cabinet. mounted on casters, is included with the equipment.

RCA SERVICE Co., INC., Camden, N. J.

SE-542 **Pocket Slide Rule** Is Easy to Read



The X-Act Pocket Slide Rule has machine divided precision graduations which are deeply engraved with black and red scales that will never wear off. Fabricated of pure white Divinyl plastic, this rule is resistant to acids, oils, etc.

The complete scales are K, A, B, Cl, C, D, S, and T.

ALVIN & Co., Windsor, Conn.

SE-485



Courles



Here's a desk and chair unit that will give you the very finest in classroom seating-with styling "as new a tomorron"-plus the feature of being able to stack both the desks and the chairs when you desire to clear the classroom for other purposes.

The SPACE-MASTER Desk and Chair Unit is ideal classroom seating . . . and a real space-saver, too.



Ask your local Rowles School Equipment Dealer for complete details on The SPACE MASTER DESK, or write for complete seating catalog 270/5.

E. W. A. ROWLES COMPANY ARLINGTON HEIGHTS, ILL.



INSTANTLY, AUTOMATICALLY ADJUSTABLEI Positively NO WOBBLEI Height adjustment instantly, easily made by student. Lifetime Swivel enclosed in Center Upright post. Friction ring holds Adjustment when stool raised from floor. Base is heavy tubular steel electric welded. Ask your school supply man for all the interesting details and sample stool. Or, write —

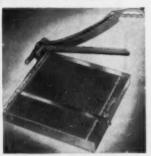
DEPENDABLE MANUFACTURING COMPANY

New Factory at Bellevue, Nebraska

SE-487

SAFEST CUTTING BOARD EVER DESIGNED . . .

PREMIER
ACE
ALL-METAL
CUTTING
BOARD



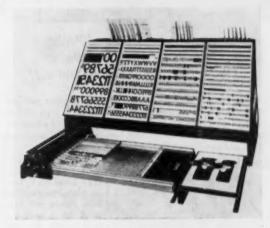
The new Premier Automatic Guard Rail feature affords complete protection against accidents—making the Ace All-Metal Cutting Board the safest for use in classrooms and school offices. Other features include automatic paper clamping device to keep material in position for accurate cutting . . . Hollow ground, self sharpening steel blade . . . permanently, accurately scored half-inch squares . . . rugged, all-metal construction for years of outstanding service.

For Complete Information, Name of Nearest Dealer Write

PHOTO MATERIALS Dept. 5, 334 N. Bell Ave.

TELL THEM VISUALLY

A marvelous office machine, the Line-O-Scribe, with which you can make professional signs and posters, information tickets, visual training aids, flip cards, proof lines of type, imprint originals for offset duplication etc., etc., Operates from standard type, reproduces cuts, half tones and linoleum block. You'll use it to announce sports and social events, for bulletin boards, for cafeteries and the many other times that you want a small quantity of printed work. Alphabet and figures in sizes from ¼ inch to 6 inches, takes either cardboard or paper . . Anyone can operate.



For more information write

THE MORGAN CO.

3984 Avondale Ave., Chicago 41, III.

SE-489

HECHEATION SINE

SAFE AND STURDY!

The Recreation Swing-Up basketball back-board—fally automatic and operated by an ENCLOSED safety worm goar. Choose fan-shaped or rectongular metal, plywood, or glass banks. All are extended 6" from supporting pipes to give full visibility. Constructed of hot galvanized steel for long life. Consult Recreation's Engineering staff about them on your next installation!



Look! Rufus, Recreation's Guardian Angel, is on constant duty with this land slide. Engineered for sturdy service!

Recreation Diving Boards—corrosion-proofed and designed to meet competition standards! Pay for THEMSELVES in maintenance savings!

Write Taday for Your Recreation Catalog:

- PLAYGROUND EQUIPMENT
- . BASKETBALL EQUIPMENT

RECREATION EQUIPMENT CORP.
Dept. SE-185, 724 W. Eighth St., Anderson, Ind.



ECONOMICAL SAFE SEATING for any size audience



AMERICAN-UNIVERSAL GALVANIZED BLEACHERS

"Package Units" at low cost

Engineered to national standards; provide exact number of seat-rows for present needs-economically expanded in depth and section for future plans. Prefabricated structural steel members Galvanized for thorough protection against rust and corrosion-at no extra cost.

LOWER LUMBER and INSTALLATION COSTS



MANUFACTURING CORP

Lower initial cost by buying lumber locally, elim-inate freight and handling. Attach seat and foot boards securely without sout bolts - no drilling or fitting of lumber required.

Write for New Bulletin ZELIENOPLE 7, PA.

SE-491



with **HEAT-TIMER VARIVALVE**



Stop wasting fuel with inefficient, clogged or worn-out valves. Don't overheat most of your building to get heat to remote radiators. Varivalves will get heat first to hard-to-heat rooms! Get heat with ounces of pressure instead of pounds! Varivalves are noiseless, will not clog and will last indefinitely! There is no other air valve like itl

unconditional money-back guarantee

Varivalves @ \$3.45

MAIL YOUR ORDER TODAY TO --HEAT-TIMER corporation

Dept. SE, 457 Broadway, New York 12, N. Y.

Enclosed please find S. Plause send.

City & State

SCHOOL INCINERATOR

Popular . . . Portable ... Practical

> Model P-60 (shown) has an 8 cu. ft. capacity per charge. Also available in 10, 13, 20 and 27 cu. ft. capacities



Hundreds of our "P" series incinerators are in use throughout the United States. Schools find them an efficient, economical way of handling wet* and dry refuse.

Installation: Unit is assembled at factory and shipped, complete with lining, ready to operate. At your option lining may be field-installed. Fits existing flue and requires no special foundation.

Easy to Operate: Exclusive sloping front permits direct loading from collection container to unit. Counter-weighted door stays open so that operator has use of both hands.

auxiliary burner recommended

For a complete catalog just send a postcard

INCINERATOR PRODUCTS COMPANY

633 POST AVENUE SOUTH . DETROIT 17, MICHIGAN

SE-493

FOLD-AWAY

FOLDING TABLES AND BENCHES



- · STURDY
- EASY TO STORE
- . EASY TO CLEAN

A choice of tops — Plastic, Masonite, Fir and Birch Plywood, and Linoleum.

Folding tables, like most other manufactured articles, have gone through a process of evolution. For years we have manufactured folding tables, and have noted the changes made and the reasons for such changes. Here we present what we consider the best line of folding tables on the market giving due consideration to sturdiness of design, finish, materials used, and all factors involved. For use in institution, folding tables made by Grogg Bros. of Spring Grove, Pa., will meet all reasonable expectations and give long years of satisfactory service.

CONSTRUCTION DETAILS

Top 3/16" Tempered Masonite. Apron 18 Gauge Cold Rolled Steel.

Leg 16 Gauge 1" O.D. Cold Rolled Steel Tubing, Acetylene Welded.

Frame 56" 5-Ply Fir Plywood 4" Wide.

Molding Extruded Aluminum "T".

Positive Lecking Device (Extra Heavy Aluminum Costing.) Clips—18 Gauge 1" Wide, held by four No. 8 x 56 Wood Screws. Floor Glides—Extra Henvy Steel, Chrome Plated.

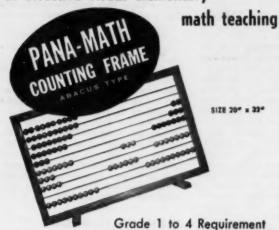
MFG. CO.

SPRING GROVE, PA.

Contact

brochure & price list.

For effective visual elementary



Pana-math is a versatile classroom counting frame for incidental learning of the important concepts of arithmetic. The ancient abacus is now adapted as a modern teaching aid to visualize numbers, groups and relationships by actual arrangement of beads. Sturdily constructed of 13/16° hardwood the frame has 10 removable push-spring rods each with 10 colorful beads. Your teachers will appreciate Pana-math . . . highly commended by teachers, principals and boards (Pat. Pend. . . . Reg. App. for)

● Time Teaching Clocks → Folding Easels → Stoves Sinks → Refrigerators → Ironing Boards Educational Toys → Jig-saw Puzzles → Peg Boards Drawing Boards → Flayhouss Screens → Boods

DEPARTMENT SE

DAINTEE TOYS, INC.

Send for "Manual for Teaching with for Teaching Frame" Countries Alles by Dr. Irring Alles

SE-495

IN STUDY HALLS



ON WORK-BENCHES



AT ART CLASSES



The Choice is Apsco



Not just pencil sharpeners—but specific models for specific applications! The ATLAS; the DANDY; the DEXTER DRAFTSMAN—each has its place and special usage in the halls of learning! Whenever teacher or student look to quality construction; long life; precision points; they select—

America's Choice — Apsco products inc.

> 9855 WEST PICO BLVD. LOS ANGELES, CALIF.



FLOORS

DISAPPEAR

when you use



TYMSAVER



This powerful mop squeezer combined with the White Oval Bucket — that holds plenty of water—will make your floor cleaning problems quickly disappear. A sturdy easy-to-use outfit that will last for years and give you big savings on lobor and materials as well.

OUTFITS

AND

Cleaning compound costs quickly reduce when this husky outfit is added to your floor cleaning equipment. Consists of a powerful Mop Squeezer plus two large Oval Buckets (capacities up to 17½ gallons) mounted on an easy rolling all steel truck.

MOPMASTER

Write for Catalog No. 153

WHITE MOP WRINGER CO.

7 MOHAWK STREET, FULTONVILLE, N. Y. Canadian Factory: Paris, Ontario, Canada

It's RIGHT ... If it's



LEVE

A COMPLETE LINE OF FLOOR CLEANING EQUIPMENT

SE-601 New Film Catalog

More than 1,000 16mm sound motion pictures are described in a new 56-page catalog, Selected Motion Pictures, published by Association Films. Almost 200 of the films (most of which are in color) are available on a free-loan basis to schools. Recent free films include Macbeth, Richard II, Man of Action, Amazing What Color Can Do!, Pacemakers and Champions and The Spray's the Thing. New rental films include Walt Disney's Treasure Island and Nature's Half Acre and, for exclusive classroom use only, The Last Leaf and The Gift of the Magi. Association Films, Inc., 347 Madison Ave., New York 17, N. Y.

SE-602 Holiday Filmstrips and Slidesets

A new, colorful 2-page booklet illustrating and describing appropriate Thanksgiving and Christmas filmstrips and color slidesets is now available according to an announcement by the Society For Visual Education. Many new materials being offered for the first time are fully described and illustrated in this booklet. Included in these new materials are: Taro's Christmas Gift, How We Got Our Christmas Carols, Making Christmas Christian, The Little Pine Tree, and Stephen Helps Christians To Share. The new booklet also offers two special Holiday Packages, each one featuring a group of the regular filmstrips specially selected for their use in school. These packages are offered at special prices until Christmas. Society FOR VISUAL EDUCATION, 1345 Diversey Parkway, Chicago 14, Ill.

SE-603 Kodak Data Book

A new Kodak Data Book designed to help the school photographer carry out the necessary steps in transforming flat copy and photographs to a filmstrip or slide sequence has been issued by the Eastman Kodak Co. Titled Photographic Production of Slides and Film Strips, the new book will enable photographers to supplement the slides and filmstrips prepared by commercial producers with presentations planned to fit a particular program for their own use. Procedures and techniques are listed to make possible the production of such presentations in small quantities at relatively low cost with conventional photographic equipment. Copies are available at 50 cents each through all Kodak dealers. EASTMAN KODAK COMPANY, Editorial Service Bureau, Rochester 4, N. Y.

SE-604 New 16mm Films

Sterling Educational Films has just announced the release of five new 16mm films for the audio-visual field. They include: Pacific Paradox-a sociological study of the Aborigines-ancient culture in a 20th century world; Arizona Lion Hunt-the Lee Brothers of Tucson and their dramatic occupation of stalking cattle marauders; North Of The Arctic Circle-a summer safari through Norway, land of surprisingly different geographical and social strata; Twenty Driving Mistakes—a highway safety film with the audience guessing how many errors one motorist commits; Winter Blunderland-safety precautions and courtesies for snow-covered streets and highways. STERLING EDUCATIONAL FILMS, 205 E. 43rd St., New York 17.

SE-605 Folk-Tale Filmstrips

A new series of filmstrips entitled Old Tales for Young Folks is now available. Familiar fairy-tale friends are shown in a new type of art work. The series includes The Three Bears, The Three Billy Goats Gruff, The Three Spinners, The Sweet Porridge, The Golden Goose and The Three Little Pigs. The Jam Handy Onganization, 2821 E. Grand Blvd., Detroit 11, Mich.

SE-606 Churchill

Churchill-Man Of The Century. 2 reels, 21 minutes, rental or sale. This film presents a brief biographical sketch of Sir Winston Churchill and highlights his life from his entry into the British army in 1895 to the celebration of his 80th bi chday. We are told of his failure to win a seat in the House of Commons in his first attempt, of his experiences both as soldier and war correspondent in the Boer War, of his entry into Parliament in 1900 and of the various ministerial offices he held up to 1939 including that of First Lord of the Admiralty during the crucial years 1911-1915. The film ends with scenes of his-80th birthday celebration and the presentation of the portrait by Graham Sutherland. It is recommended for studies in world affairs adult education history classes, and general audiences. Виттын INFORMATION SERVICES, 30 Rockefeller Plaza, New York 20, N. Y.



MANUFACTURERS' CATALOGS

SE-607 Radiation Measuring Equipment

Catalog P. A new 48-page, two-color catalog just released by the Nuclear Instrument and Chemical Corporation describes a complete line of radiation measuring equipment for research applications. Included are photographs and descriptions of individual instruments as well as suggested groupings of units for specific applications. Scalers, count rate meter-portable instruments, Geiger, proportional and scintillation counters are described. A radiochemical price list containing 144 different Carbon-14 labeled radioactive compounds is also included. Nuclear Instruments and Chemical Corp., 229 W. Erie St., Chicago 10, Ill.

SE-608 Granite

Granite in the School. Applications of granite as a structural and ornamental stone for schools is the subject of a new brochure issued by Cold Spring Granite Co. The literature features architect's drawings of entrances, copings, benches, play units, lavatories, facings, fountains and sills made from granite. Sketches were made by a member of the A.I.A. Advantages of granite are listed for each application, and a special section at the back of the brochure deals with such questions as costs, colors, sizes, finishes and delivery. COLD SPRING GRANITE Co., Cold Spring, Minn.

SE-609 Swimming Pool Catalog

Swimming Pools of Mosaic Tile is the title of a new 8-page bulletin just released by the Mosaic Tile Co., which gives complete swimming pool construction details and ceramic tile specifications for pools and surrounding areas. Characteristics of Mosaic ceramic tile which assure swimming pool sanitation, safety, permanent beauty and ease of maintenance are fully explained. The Mosaic Tile Co., Zanesville, Ohio.

SE-610 School Interiors

Flexibility in the Co-Ordinated Classroom is the title of a new informative booklet just released. The report, prepared by Darell Boyd Harmon & Associates for The Hauserman Company, is printed in text form with attractive line drawings illustrating the points made. The subject of school interior flexibility and its impact on the psychological and physical environment of the child is discussed as is the possible solution to the problem of achieving permanent interior flexibility through the application of movable steel partitions designed expressly for school applications. THE E. F. HAUSERMAN Co., 6800 Grant Ave., Cleveland 5, Ohio,

SE-611 Plastic Laminates

A new color catalog showing actual design samples of Decarlite Hi-Pressure Plastic Laminates is now being offered by Decar Plastic Corp. The new catalog shows reproductions of the company's Decarlite line and contains sample plastic sheets to show actual colors and the new designs. It also contains a listing of some of the new Decarlite line with the new patterns and colors. There is also a new group of modern wood patterns including new Harvest Brown Birch, Platinam Walnut and White Maple which is used for school desk tops. Decar Plastic Corp., 1212 N. Central Park Ave., Chicago, III.

SE-612 Tile

Tile For Schools, a new 24-page booklet contains many full-color photographs of ways to use tile to reduce maintenance costs in schools. These photographs cover the general service areas such as kitchens, cafeterias, washrooms, entrance halls, and corridors. The booklet illustrates ways in which tile can contribute to better appear-

ance and lower upkeep costs in specialized areas such as locker and shower rooms, around chalkboards, and elsewhere. Complete descriptions are given for all installations shown. AMERICAN-OLEAN TILE CO., 1000 Cannon Ave., Lansdale, Pa.

SE-613 Sound Slide Projection Equipment Record

A new master standard record containing new recommended standards for recording with automatic sound slide projection equipment has been published by the DuKane Corp., and is available at no charge. The new recommended standards are a consensus of an industry-wide conference of sound slidefilm engineers in 1954 at which an extensive range of standardization problems were examined. DuKane Corp., St. Charles, Ill.

SE-498

Having Moisture Control Problems?

-YOU'LL FIND THE ANSWER IN-

WATERLOX TRANSPARENT and Other WATERLOX PRODUCTS

Specialists experienced in dealing with Moisture-Control are on hand to assist you with your particular problem—all laboratory-trained.

JUST WRITE or PHONE

WATERLOX

DIVISION OF
THE EMPIRE VARNISH COMPANY
2636 East 76th St. Glereland 4, Ohio

MANUFACTURERS' CATALOGS

SE-614 Soap Dispensers

A new catalog illustrating and describing the complete line of American soap dispensers has been issued by American Dispenser Co. The line includes liquid, lather and powder soap dispensers as well as gravity feed systems. AMERICAN DISPENSER Co., INC., 115 E. 23rd St., New York 10, N. Y.

SE-615 Fire Protection Systems

Foamite Air/oam. Information about Foamite Air/oam Fire Extinguishing

Equipment for combatting various types of flammable liquid fires is contained in a 36-page booklet published by the American LaFrance Corp. This booklet contains engineering data and other useful facts on Foamite Airfoam fixed fire protection systems, portable equipment and semi-portable equipment. American LaFrance Corp., Elmira, N. Y.

SE-616 Electric Typewriter

Two new booklets on instructional material on the electric typewriter are now available. First of the new booklets, The Key To Relaxed Typing, offers a typing guide for students and office typists in transferring easily from the manual to the

electric typewriter. Electric Typewriting For The Classroom Teacher, second of the pair, contains a complete teacher's lesson plan for electric typewriter instruction, including transferring from manual to electric, training a beginner on the electric, and transferring from electric to manual. The booklets are available to typing classes through the ROYAL TYPEWRITER Co., School Department, 2 Park Ave., New York 16, N. Y.

SE-617 Lockers

Equipto Modern-Flow Lockers is the title of a two-color brochure released by the Equipto Div. of Aurora Equipment Co. It describes how the lockers are made and stocked in single, double, and multiple tier models. Standard equipment includes base, padlock attachment, and hardware. A hat shelf is included on single tier models. Modern-Flow lockers can also be furnished without base, for recessing in walls; any special sizes and styles are available on special order. Quickly available accessories also include sloping tops, flat key locks and combination locks. EQUIPTO DIV. OF AURORA EQUIPMENT Co., Prairie and Paul Streets, Aurora, Ill.

SE-618 Fibre Forms

A four-page catalog entitled Beautiful Round Columns of Concrete describes Sonotube fibre concrete forms. They are specifically developed by Sonoco to provide a fast and economical method of forming round columns of concrete. Made of paper fibre products, they are available in 31 standard inside diameters (special sizes within this range are also available), and up to 24' long or longer on special order. Sonoco Products Co., Hartsville, S. C.

SE-619 Portable Potentiometers

Data Sheet E-51(2). Complete information about single, double, and triple range portable potentiometers, widely used for numerous emf measurements in plant and laboratory, is now available in a 2-page data sheet just published by Leeds & Northrup Co. This concise sheet lists instrument features and tabulates the characteristics of each potentiometer for ready comparison. LEEDS & NORTHRUP CO., 4934 Stenton Ave., Philadelphia 44, Pa.

SE-620 1956 Radio Catalog

Allied Radio Corp. of Chicago announces the Fall release of its new 1956 catalog No. 150, featuring a large selection of radio, television and electronic parts and equipment for use in schools, classrooms, laboratories and shops. The 324 pages lists over 26,000 items. Included is an expanded section on training kits, recording and test equipment, books, diagrams, parts and tubes, and other equipment required for radio and electronic training activities. A 128-page rotogravure section is devoted to sound equipment. Other items included is the latest tape and disc recorders in all price ranges, plus a wide variety of recording accessories. Allied Radio Corp., 100 N. Western Ave., Chicago 80, Ill.



"People often are hoggish about paper towels."

WITHOUT realizing it they'll use from two to four single fold towels just for drying.

— wasting as much as 40 inches of paper toweling.

But you can control this waste.

With savings up to 40%!

How?

By installing WESTROLL TOW-ELS in West Micromatic Cabinets*.

PEOPLE quickly unroll as little or as much as they want. But with-

out realizing it they take less. Averaging 17 inches of soft, absorbent WESTROLL.

Saves janitors' time, too.

- one filling of the tamper-proof cabinet equals four of a single fold towel dispenser.
- there's less litter to clean up.

And washrooms are cleaner, neater.

LET a West representative tell you more about WESTROLL's washroom economies.

*Cabinets are loaned.

OLDEST AND LARGEST COMPANY
OF ITS KIND IN THE WORLD



Branches in Principal Cities

FREE FOLDER

Use your business letterhead to request our felder on cutting towel costs with WESTROLL.

WEST DISINFECTING COMPANY Dept. 15, 42-16 West St. Long Island City 1, N. Y.

In Canada: 5621-23 Casgrain Avenue, Montreal



NEW TEXTBOOKS

SE-621 Spanish Text

Lecturas Y Leyendas by Dian Kent and Margaret Roalfe offers reading that will be of interest to students. The abundant use of cognates, the constant repetition of basic vocabulary, and the ample footnotes of the non-grammatical type are helpful reading aids. Brief introductory passages in English accompany selections whose theme may be unfamiliar to students. Each reading is followed by a selected list of idioms for study, and by a set of exercises which provide for oral and written practice of the language, and which also cover adequately the material presented in the text. There are two vocabularies, Spanish-to-English and English-to-Spanish. GINN AND COMPANY, Boston, Mass.

SE-622 Guidance Program

A Guidance Program for Rural Schools by Glyn Morris. This new booklet pinpoints the unique problems in guiding rural youth and suggests ways in which to start a program or to help an established program grow. After describing the special problems in rural guidance, the author sets forth procedures that can be used to overcome these problems. The booklet points out the importance of good records and clearly outlines the role of the classroom teacher or the rural counselor. Written with both the limitations and resources of rural schools in mind, the booklet can be used by elementary or high school teachers in schools of any size in all types of rural communities. Science Research Associates, 57 W. Grand Ave., Chicago 10. III.

SE-623 Typewriting Speed Tests

Progressive Typewriting Speed Tests is a 96-page book of 144 timed writing selections with 100 per cent copy control. Each piece of timed writing is arranged in speed steps of 5 and 10 words a minute, with three selections (very easy then easy, then normal in difficulty) on each step. All selections are business letters so that skill may be built on the vocabulary where it is most needed. Also included in the book are work counts, instant-scoring speed scales, and a separate section on number typing. Written by Professor Dick Mount. Price is \$1.32. McGraw-Hill Book Co., Inc., Gregg Pub. Div., 330 W. 42nd St., New York 36, N. Y.

SE-624 American Heritage Books

A leaflet, just released, tells of the American Heritage Books, now available, which are designed to interest boys and girls at the high school as well as the elementary level. The books are built around historical incidents of interest to most people from childhood through adulthood. The following readability factors are carefully controlled at the fifth-grade level: vocabulary, sentence length and structure; paragraph length and structure; the number,

kind, and complexity of concepts. The American Book Co., 55 Fifth Ave., New York 3, N. Y.

SE-625 Adding Machines

How To Use Ten-Key Adding Machines, by Meehan and Kahn, is a new textworkbook in the business machines series, published by the Gregg Division of Mc-Graw-Hill Book Co., Inc. It includes instruction on all the latest standard 10-key machines. The book emphasizes touchcontrol for higher speed, greater accuracy. and less chance of omitting or transposing a figure. The fundamental operations are introduced in the first seven lessons. Lesson 8 reviews and tests all of these operations. Practical business applications presented in Lessons 9-14 include the figuring of statements, payrolls, interest and mortgages, and the extending and discounting of invoices. Each of these advanced lessons features timed problems for the further development of the fundamental skills. Lesson 15 is a review and test of the entire course. Greeg Publishing Div., McGraw-Hill Book Co., Inc., 330 W. 42nd St., New York 36, N. Y.

SE-626 Farm Shop Skills

Farm Shop Skills in Mechanized Agriculture by Sampson, Mowery, and Kugler. From their background in practical farming, education, and industry, the authors have framed this specific treatment of the farmer's jobs in construction, farm maintenance and repair work. Many projects are described and developed; the how-to-do-it phase of each is presented by illustration, with the captions outlining the operation. In preparing Farm Shop Skills a special effort was made to bring the farmer abreast of the very latest developments in his field—to make his work truly mechanized. American Technical. Society, 848 East 58th St., Chicago 37, Ill.

NOW ... offered to you for the first time NEW · DRAMATIC this · ULTRA BELUXE "MANUAL NOW you can bind all types OF MODERN PLASTIC of literature PLASTIC STROLIS AND NODERN LOOSE-LEAF BINDING" **qualified** executives **General Binding Corporation** This handsome, elaborate Manual-calar-812 West Belmont Avenue fully GBC plastic bound-has been months Dept. SE-10 Chicago 14, Illinois In preparation and is one of the most expensive and idea-stimulating books ever Please send me my FREE "Manual of offered for selected distribution. Illustrates Modern Plastic and Loose-Loaf Binding." I the many advantages of the modern GBC understand there is no cast or obligation. Binding System...increased efficiencies ...savings in time and money...greater prestige, readership, and life for catalogs, Fosition. reports and presentations. Pages lie flatturn easily. You and your staff will want Organization_ to examine this informative manual. Send Address ... for your FREE copy today. Supply is limited. GENERAL BINDING CORPORATION 812 W. Belmont, Dept. 5E-10 Chicago 14

Index to Advertisers_

A		
-	Acme Chemical Company	110
ASEU A	Adams & Westlake Co., The32,	33
ASAU A	Advance Floor Machine Co	197
	justo Equipment Co	
A		193
AS&U A	Aluminum Cooking Utensil Co., Inc.,	
	The	
	Americana Corporation	115
		178
	American City B reau American Floor Surfacing Machine	133
MUNIO /	Co., The	189
1	American-Olean Tile Company	205
AS&U	American Optical Company93,	138
1	American Photocopy Equipment Co.	
	27,	
	American School & University	15
ASEU /	American Seating Company	31
		192
1	Apsco Products Inc.	209
	Arco Company, The	160
ASAU .	Automatic Devices Company	200
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Associate Devices Company	200
1	Baker-Roos, Inc	158
	Barricks Mfg. Co	192
-	Barricks Mfg. Co	194
	Beckley-Cardy Company	180
ASEU	Benjamin Electric Mfg. Co	13
ASEU	Berlin Chapman Co	177
	Bradley Washfountain Co	136
	Brever Electric Mfg. Co	34
	Brille Manufacturing Co	181
	ourse bysins, inc	203
AS&U	Celetex Corporation, The	141
	Chicago Hardware Foundry Co.,	
	The	98
	Chicago Roller Skate Company	120
	Church Mfg. Co., C. F.	118
AS&U	Claridge Products	187
	Clarin Manufacturing Co134,	135
	Colonial Engineering Co., Inc172;	
	Concession Supply Co	
	Conn. Ltd., C. G	142
	Craftools, Inc.	
		140
		193
ASAU	Cram Co., Inc., The Geo. F	193
ASAU	Cram Co., Inc., The Geo. F	193 199 12
ASAU	Cram Co., Inc., The Geo. F	193 199 12
ASAU	Cram Co., Inc., The Geo. F	193 199 12 128
AS&U	Cram Co., Inc., The Geo. F	193 199 12 128
AS&U	Cram Ce., inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deintee Toys, inc. Delta Power Tool Div., Rockwell	193 199 12 128 209
ASAU	Cram Co., Inc., The Geo. F	193 199 12 128 209
ASAU	Cram Co., Inc., The Geo. F	193 199 12 128 209 29 196
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deintee Toys, Inc. Delta Power Teal Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Ce.	193 199 12 128 209 29 196 207
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deintee Toys, Inc. Delta Power Tool Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Co. Desk Tops, Inc.	193 199 12 128 209 29 196 207 35
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deintee Toys, Inc. Delta Power Tool Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Co. Desk Tops, Inc. Detroit Lectern Company Detroit Steel Products Co.	193 199 12 128 209 29 196 207 35 201 30
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deintee Toys, Inc. Delta Power Tool Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Co. Desk Tops, Inc. Detroit Lectern Company Detroit Steel Products Co.	193 199 12 128 209 29 196 207 35 201 30
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deintee Toys, Inc. Delta Power Teal Div., Rackwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Ce. Desk Tops, Inc. Detroit Lectern Company Detroit Steel Products Co. Dictaphone Corp.	193 199 12 128 209 29 196 207 35 201 30 157
	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Delinee Toys, Inc. Delta Power Tool Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Co. Desk Tops, Inc. Detroit Lectern Company Detroit Steel Products Co. Dictaphone Corp. Ditto, Inc. Draper Shade Ce., Luther O.	193 199 12 128 209 29 196 207 35 201 30 157 99
	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deintee Toys, Inc. Delta Power Teol Div., Rockwell Manufacturing Co. De Luxe Metal Furniture Co. Dependable Mfg. Co. Desk Tops, Inc. Detroit Lectern Company Detroit Steel Products Co. Dictaphone Corp. Ditto, Inc. Draper Shade Co., Luther O. Dudley Lock Corp.	193 199 12 128 209 29 196 207 35 201 30 157 99 106 104
	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deintee Toys, Inc. Delta Power Teol Div., Rockwell Manufacturing Co. De Luxe Metal Furniture Co. Dependable Mfg. Co. Desk Tops, Inc. Detroit Lectern Company Detroit Steel Products Co. Dictaphone Corp. Ditto, Inc. Draper Shade Ce., Luther O. Dudley Leck Corp. Duke Manufacturing Co.	193 199 12 128 209 29 196 207 35 201 30 157 99 106 104
	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deintee Toys, Inc. Delta Power Teol Div., Rockwell Manufacturing Co. De Luxe Metal Furniture Co. Dependable Mfg. Co. Desk Tops, Inc. Detroit Lectern Company Detroit Steel Products Co. Dictaphone Corp. Ditto, Inc. Draper Shade Co., Luther O. Dudley Lock Corp.	193 199 12 128 209 29 196 207 35 201 30 157 99 106 104
	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deintee Toys, Inc. Delta Power Teol Div., Rockwell Manufacturing Co. De Luxe Metal Furniture Co. Dependable Mfg. Co. Desk Tops, Inc. Detroit Lectern Company Detroit Steel Products Co. Dictaphone Corp. Ditto, Inc. Draper Shade Ce., Luther O. Dudley Leck Corp. Duke Manufacturing Co.	193 199 12 128 209 29 196 207 35 201 30 157 99 106 104
	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deintee Toys, Inc. Delto Power Teel Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Ce. Destroit Lectern Company Detroit Steel Products Co. Dictaphone Corp. Ditto, Inc. Draper Shade Ce., Luther O. Dudley Lock Corp. Duke Manufacturing Ce. Duplex Straw Dispenser Co.	193 199 12 128 209 29 196 207 35 201 30 157 99 106 104 162 203
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deintee Toys, Inc. Delto Power Teel Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Ce. Destroit Lectern Company Detroit Steel Products Co. Dictaphone Corp. Ditto, Inc. Draper Shade Ce., Luther O. Dudley Lock Corp. Duke Manufacturing Ce. Duplex Straw Dispenser Co.	193 199 12 128 209 29 196 207 35 201 30 157 99 106 104 162 203
	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deline Toys, Inc. Deline Power Tool Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Co. Desk Tops, Inc. Detroit Lectern Company Detroit Steel Products Co. Dictaphone Corp. Ditto, Inc. Draper Shade Ce., Luther O. Dudley Lock Corp. Duke Manufacturing Ce. Duplex Straw Dispenser Co. Eagle Lock Company Empire Varnish Co., The, Waterlay	193 199 12 128 209 29 196 207 35 201 30 157 99 106 104 162 203
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deintee Toys, Inc. Delta Power Teol Div., Rockwell Manufacturing Co. De Luxe Metal Furniture Co. Dependable Mfg. Co. Desk Teps, Inc. Detroit Lectern Company Detroit Steel Products Co. Dictaphane Corp. Ditto, Inc. Draper Shade Co., Luther O. Dudley Lock Corp. Duke Manufacturing Co. Duplex Straw Dispenser Co. Eagle Lock Company Empire Varnish Co., The, Waterlos Div.	193 199 12 128 209 29 196 207 35 201 30 157 99 106 104 162 203
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Delta Power Teel Div., Rockwell Manufacturing Co. Delta Tops, Inc. Dependable Mfg. Co. Desk Tops, Inc. Detroit Lectern Company Detroit Steel Products Co. Dictaphone Corp. Ditto, Inc. Draper Shade Co., Luther O. Dudley Lock Corp. Duke Manufacturing Co. Duplex Straw Dispenser Co. Eagle Lock Company Empire Varnish Co., The, Waterlay Div. Equipto Division, Aurora Equipmen	193 199 12 128 209 29 196 207 35 201 30 30 157 99 106 162 203
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Delinee Toys, Inc. Delta Power Tool Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Co. Dest Tops, Inc. Detroit Steel Products Co. Dictaphone Corp. Ditto, Inc. Draper Shade Ce., Luther O. Dudley Leck Corp. Duke Manufacturing Ce. Duplex Straw Dispenser Co. Eagle Lock Company Empire Varnish Co., The, Waterlos Div. Equipto Division, Aurora Equipmen Co.	193 199 12 128 209 29 196 207 35 201 30 30 1157 99 106 104 162 203
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deline Toys, Inc. Delta Power Tool Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Co. Desk Tops, Inc. Detroit lectern Company Detroit Steel Products Co. Dictaphone Corp. Ditto, Inc. Draper Shade Co., Luther O. Dudley Leck Corp. Duke Manufacturing Co. Duplex Straw Dispenser Co. Eagle Lock Company Empire Varnish Co., The, Waterlay Div. Equipto Division, Aurora Equipmen Co. Everett Plano Company	193 199 12 128 209 29 196 207 35 201 30 157 99 106 104 162 203 153 153 162 201 164 203
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Delinee Toys, Inc. Delta Power Tool Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Co. Dest Tops, Inc. Detroit Steel Products Co. Dictaphone Corp. Ditto, Inc. Draper Shade Ce., Luther O. Dudley Leck Corp. Duke Manufacturing Ce. Duplex Straw Dispenser Co. Eagle Lock Company Empire Varnish Co., The, Waterlos Div. Equipto Division, Aurora Equipmen Co.	193 199 12 128 209 29 196 207 35 201 30 157 99 106 104 162 203 153 153 162 201 164 203
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deline Toys, Inc. Delta Power Tool Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Co. Desk Tops, Inc. Detroit lectern Company Detroit Steel Products Co. Dictaphone Corp. Ditto, Inc. Draper Shade Co., Luther O. Dudley Leck Corp. Duke Manufacturing Co. Duplex Straw Dispenser Co. Eagle Lock Company Empire Varnish Co., The, Waterlay Div. Equipto Division, Aurora Equipmen Co. Everett Plano Company	193 199 12 128 209 29 196 207 35 201 30 157 99 106 104 162 203 153 153 162 201 164 203
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Delinee Toys, Inc. Delta Power Tool Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Co. Dest Tops, Inc. Detroit Steel Products Co. Dictaphone Corp. Ditto, Inc. Draper Shade Ce., Luther O. Dudley Leck Corp. Duke Manufacturing Ce. Duplex Straw Dispenser Co. Eagle Lock Company Empire Varnish Co., The, Waterlos Div. Equipto Division, Aurora Equipmen Co. Everett Piana Company Executone, Inc.	193 199 12 128 209 29 196 207 35 30 1357 99 106 104 162 203 201 162 203
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deline Toys, Inc. Delta Power Tool Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Co. Desk Tops, Inc. Detroit lectern Company Detroit Steel Products Co. Dictaphone Corp. Ditto, Inc. Draper Shade Co., Luther O. Dudley Leck Corp. Duke Manufacturing Co. Duplex Straw Dispenser Co. Eagle Lock Company Empire Varnish Co., The, Waterlay Div. Equipto Division, Aurora Equipmen Co. Everett Plano Company	193 199 12 128 209 29 196 207 35 201 30 157 99 106 104 162 203 173 181 181
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deintee Toys, Inc. Delta Power Teol Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Co. Desk Tops, Inc. Detroit Steel Products Co. Dictophone Corp. Ditto, Inc. Draper Shade Ce., Luther O. Dudley Lock Corp. Duke Manufacturing Co. Duplex Straw Dispenser Co. Eagle Lock Company Empire Varnish Co., The, Waterlos Div. Equipto Division, Aurora Equipmen Co. Everett Piano Company Executone, Inc. Fairbanks, Morse & Co. Farquher Transparent Globes Finnell System, Inc.	193 199 12 128 209 29 196 207 35 30 1157 99 106 104 162 203 201 160 205 131 160 161 161 161 161 161 161 161 161 16
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deintee Toys, Inc. Delta Power Teel Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Ce. Detroit Lectern Company Detroit Steel Products Co. Dictaphone Corp. Ditto, Inc. Draper Shade Ce., Luther O. Dudley Leck Corp. Duke Manufacturing Ce. Duplex Straw Dispenser Co. Eagle Lock Company Empire Varnish Co., The, Waterlos Div. Equipto Division, Aurora Equipmen Co. Everett Piano Company Executone, Inc. Fairbanks, Morse & Co. Farquher Transparent Globss Finnell System, Inc.	193 199 12 128 209 29 196 207 35 201 30 157 99 106 104 162 203 201 157 104 162 203 1157 104 1160 1160 1160 1160 1160 1160 1160
ASAU	Cram Ce., Inc., The Geo. F. Cretors Corp. Curtiss-Wright Corporation Deintee Toys, Inc. Delta Power Teol Div., Rockwell Manufacturing Ce. De Luxe Metal Furniture Co. Dependable Mfg. Co. Desk Tops, Inc. Detroit Steel Products Co. Dictophone Corp. Ditto, Inc. Draper Shade Ce., Luther O. Dudley Lock Corp. Duke Manufacturing Co. Duplex Straw Dispenser Co. Eagle Lock Company Empire Varnish Co., The, Waterlos Div. Equipto Division, Aurora Equipmen Co. Everett Piano Company Executone, Inc. Fairbanks, Morse & Co. Farquher Transparent Globes Finnell System, Inc.	193 199 12 128 209 29 196 207 35 201 30 157 99 106 162 203 157 164 162 203 157 164 165 165 165 166 168 168 168 168 168 168 168

Ford Motor Company	139
Fort Howard Paper Company	6
AS&U Formica Company, The	2
Geerpres Wringer, Inc	122
General Binding Corp	213
Goder Incinerators, Joseph	114
Graphic Systems	
S&U Griggs Equipment Company	
S&U Grogg Bros. Mfg. Co	
Haag Machine Company	199
AS&U Haldeman-Homme Mfg. Co	127
Hamilton Mfg. Co	202
Hammond Organ Company	
Hampden Specialty Products, Inc	
Haws Drinking Faucet Co	
Heat-Timer Corporation Heinz Company, H. J.	
Heyer Corporation, The	126
AS&U Hild Floor Machine Co.	199
AS&U Hillyard Chemical Co	. 161
Holcomb & Hoke Mfg. Co., Inc	. 167
Hollyw-od Plastic Arts	. 192
H. nt Pen Company, C. Howard	
AS&U Huntington Laboratories	149
Note the say mig. Co., the manner	. 104
Incinerator Products Company	. 208
Ionia Mfg. Company	. 189
International Seat Corporation	. 174
AS&U Jennison-Wright Corp., The	. 14
AS&U Johns-Manville	
Johnson Plastic Tops	. 195
AS&U Johnson Service Company	
Kant-Slam Door Check Co	. 204
AS&U Keyes Fibre Sales Corp	. 176
AS&U Kewaunee Mfg. Co	176 23 173
AS&U Kewaunee Mfg. Co	176 23 173
AS&U Kewaunee Mfg. Co	176 23 173 140 126
AS&U Kewaunee Mfg. Co	176 23 173 140 126 100
AS&U Kewaunee Mfg. Co	176 173 140 126 120
AS&U Kewaunee Mfg. Co. AS&U Keyes Fibre Sales Corp. AS&U Kuehne Manufacturing Company Leavitt Bleacher Co. AS&U Legge Co., Inc., Walter G. AS&U Libbey-Owens-Ford AS&U Loxit Systems Mackin Venetian Blind Co. Manley, Inc. AS&U Moster Lock Company	176 23 173 140 126 100 120
AS&U Kewaunee Mfg. Co	176 173 173 126 100 120 123 181
AS&U Kewaunee Mfg. Co	176 173 140 126 100 120 123 181 147
AS&U Kewaunee Mfg. Co. AS&U Keyes Fibre Sales Corp. AS&U Kuehne Manufacturing Company Leavitt Bleacher Co. AS&U Lagge Co., Inc., Walter G. AS&U Libbey-Owens-Ford AS&U Loxit Systems Mackin Venetian Blind Co. Manley, Inc. AS&U Master Lock Company Mastic Tile Corp. of America Maxim Silencer Company Mayline Company, Inc.	176 173 173 140 120 120 120 123 181 147
AS&U Kewaunee Mfg. Co	176 173 173 140 126 100 120 123 181 147 185 196
AS&U Kewaunee Mfg. Co. AS&U Keyes Fibre Sales Corp. AS&U Kuehne Manufacturing Company Leavitt Bleacher Co. AS&U Lagge Co., Inc., Walter G. AS&U Libbey-Owens-Ford AS&U Loxit Systems Mackin Venetian Blind Co. Manley, Inc. AS&U Master Lock Company Mastic Tile Corp. of America Maxim Silencer Company Mayline Company, Inc. AS&U Medart Products, Inc., Fred Meese, Inc. AS&U Metalab Equipment Corp.	176 173 140 126 120 120 121 181 185 196 197 132
AS&U Kewaunee Mfg. Co. AS&U Keyes Fibre Sales Corp. AS&U Kuehne Manufacturing Company. Leavitt Bleacher Co. AS&U Legge Co., Inc., Walter G. AS&U Libbey-Owens-Ford AS&U Loxit Systems Mackin Venetian Blind Co. Manley, Inc. AS&U Master Lock Company Mastic Tile Corp. of America Maxim Silencer Company Mayline Company, Inc. AS&U Medart Products, Inc., Fred Meese, Inc. AS&U Metalab Equipment Corp. AS&U Metalab Equipment Corp.	176 23 173 140 160 160 120 181 181 182 181 182 181 182 183 184 185 185 186
AS&U Kewaunee Mfg. Co. AS&U Keyes Fibre Sales Corp. AS&U Kuehne Manufacturing Company. Leavitt Bleacher Co. AS&U Legge Co., Inc., Walter G. AS&U Libbey-Owens-Ford AS&U Loxit Systems Mackin Venetian Blind Co. Manley, Inc. AS&U Master Lock Company Mastic Tile Corp. of America Maxim Silencer Company Mayline Company, Inc. AS&U Medart Products, Inc., Fred Meese, Inc. AS&U Metalab Equipment Corp. AS&U Metalab Equipment Corp. AS&U Metalab Equipment Corp. AS&U Metalab Review Co.	176 173 140 126 120 120 120 120 121 181 181 181 185 187 187 187 187 187 187 187 187 187 187 187 187 187 187 187
AS&U Kewaunee Mfg. Co	176 23 173 140 126 120 120 123 181 147 199
AS&U Kewaunee Mfg. Co. AS&U Keyes Fibre Sales Corp. AS&U Kuehne Manufacturing Company Leavitt Bleacher Co. AS&U Lagge Co., Inc., Walter G. AS&U Libbey-Owens-Ford AS&U Loxit Systems Mackin Venetian Blind Co. Manley, Inc. AS&U Master Lock Company Mastic Tile Corp. of America Maxim Silencer Company Mayline Company, Inc. AS&U Medart Products, Inc., Fred Meese, Inc. AS&U Metalab Equipment Corp. AS&U Metwood Manufacturing Company AS&U Michaels Art Bronze Co. AS&U Michaels Art Bronze Co. Mississippi Glass Company	
AS&U Kewaunee Mfg. Co. AS&U Keyes Fibre Sales Corp. AS&U Kuehne Manufacturing Company Leavitt Bleacher Co. AS&U Legge Co., Inc., Walter G. AS&U Libbey-Owens-Ford AS&U Loxit Systems Mackin Venetian Blind Co. Manley, Inc. AS&U Master Lock Company Mastic Tile Corp. of America Maxim Silencer Company Mayline Company, Inc. AS&U Medart Products, Inc., Fred Meese, Inc. AS&U Metalab Equipment Corp. AS&U Metveod Manufacturing Company AS&U Michaels Art Bronze Co. AS&U Michaels Missispipi Glass Company AS&U Mitchell Mfg. Co.	
AS&U Kewaunee Mfg. Co. AS&U Keyes Fibre Sales Corp. AS&U Kuehne Manufacturing Company Leavitt Bleacher Co. AS&U Lagge Co., Inc., Walter G. AS&U Libbey-Owens-Ford AS&U Loxit Systems Mackin Venetian Blind Co. Manley, Inc. AS&U Master Lock Company Mastic Tile Corp. of America Maxim Silencer Company Mayline Company, Inc. AS&U Medart Products, Inc., Fred Meese, Inc. AS&U Metalab Equipment Corp. AS&U Metalab Equipment Corp. AS&U Michaels Art Bronze Co. AS&U Michaels Art Bronze Co. AS&U Michaels Art Bronze Co. Mississippi Glass Company AS&U Mitchell Mfg. Co. Monroe Company, The AS&U Motoporoe Company, The AS&U Motoporoe Company, The	
AS&U Kewaunee Mfg. Co. AS&U Keyes Fibre Sales Corp. AS&U Kuehne Manufacturing Company Leavitt Bleacher Co. AS&U Legge Co., Inc., Walter G. AS&U Libbey-Owens-Ford AS&U Loxit Systems Mackin Venetian Blind Co. Manley, Inc. AS&U Master Lock Company Mastic Tile Corp. of America Maxim Silencer Company Mayline Company, Inc. AS&U Medart Products, Inc., Fred Messe, Inc. AS&U Metalab Equipment Corp. AS&U Metalab Equipment Corp. AS&U Michaels Art Bronze Co. AS&U Michaels Art Bronze Co. AS&U Michaels Art Bronze Co. AS&U Michaels Missispipi Glass Company AS&U Michael Mfg. Co. Monroe Company, The AS&U Montgomery Mfg. Co. Morgan Co., The	
AS&U Kewaunee Mfg. Co. AS&U Keyes Fibre Sales Corp. AS&U Kuehne Manufacturing Company Leavitt Bleacher Co. AS&U Legge Co., Inc., Walter G. AS&U Libbey-Owens-Ford AS&U Loxit Systems Mackin Venetian Blind Co. Manley, Inc. AS&U Master Lock Company Mastic Tile Corp. of America Maxim Silencer Company Mayline Company, Inc. AS&U Medart Products, Inc., Fred Meese, Inc. AS&U Metalab Equipment Corp. AS&U Metalab Equipment Corp. AS&U Michaels Art Bronze Co. AS&U Michaels Art Bronze Co. AS&U Michaels Art Bronze Co. Mississippi Glass Company AS&U Michael Mfg. Co. Monroe Company, The AS&U Michael Mfg. Co.	
AS&U Kewaunee Mfg. Co. AS&U Keyes Fibre Sales Corp. AS&U Kuehne Manufacturing Company. Leavitt Bleacher Co. AS&U Legge Co., Inc., Walter G. AS&U Libbey-Owens-Ford AS&U Loxit Systems Mackin Venetian Blind Co. Manley, Inc. AS&U Master Lock Company Mastic Tile Corp. of America Maxim Silencer Company Mayline Company, Inc. AS&U Medart Products, Inc., Fred Messe, Inc. AS&U Metalab Equipment Corp. AS&U Metalab Equipment Corp. AS&U Michaels Art Bronze Co. AS&U Michaels Art Bronze Co. AS&U Michaels Art Bronze Co. AS&U Michaels Mfg. Co. Monroe Company, The AS&U Montgomery Mfg. Co. Morgan Co., The AS&U Multi-Clean Products, Inc. National Electrical Mfrs. Assn.	176 233 1773 1400 1200 1200 1200 1200 1200 1200 1200
AS&U Kewaunee Mfg. Co. AS&U Keyes Fibre Sales Corp. AS&U Kuehne Manufacturing Company Leavitt Bleacher Co. AS&U Lagge Co., Inc., Walter G. AS&U Libbey-Owens-Ford AS&U Loxit Systems Mackin Venetian Blind Co. Manley, Inc. AS&U Master Lock Company Mastic Tile Corp. of America Maxim Silencer Company Mayline Company, Inc. AS&U Medart Products, Inc., Fred Meese, Inc. AS&U Metalab Equipment Corp. AS&U Metalab Equipment Corp. AS&U Michaels Art Bronze Co. AS&U Michaels Art Bronze Co. Massisippi Glass Company AS&U Mitchell Mfg. Co. Monroe Company, The AS&U Montgomery Mfg. Co. Morgan Co., The AS&U Multi-Clean Products, Inc. National Electrical Mfrs. Assn. AS&U National Lock Company AS&U National Lock Company AS&U National School Furniture Co.	176 233 173 1400 1200 1200 1200 1200 1200 1200 1200
AS&U Kewaunee Mfg. Co. AS&U Keyes Fibre Sales Corp. AS&U Kuehne Manufacturing Company Leavitt Bleacher Co. AS&U Legge Co., Inc., Walter G. AS&U Libbey-Owens-Ford AS&U Loxit Systems Mackin Venetian Blind Co. Manley, Inc. AS&U Master Lock Company Mastic Tile Corp. of America Maxim Silencer Company Mayline Company, Inc. AS&U Medart Products, Inc., Fred Messe, Inc. AS&U Metalab Equipment Corp. AS&U Metalab Equipment Corp. AS&U Michaels Art Bronze Co. AS&U Michaels Art Bronze Co. AS&U Michaels Art Bronze Co. AS&U Michaels Massispip Glass Company AS&U Michaels Mfg. Co. Monroe Company, The AS&U Montgomery Mfg. Co. Monroe Company Mfg. Co. Monroe Company AS&U Multi-Clean Products, Inc. National Electrical Mfrs. Assn. AS&U National Schoel Furniture Co. AS&U National Schoel Furniture Co. AS&U National Schoel Furniture Co. AS&U Nasbitt, Inc., John J	1766; 213 1773 1400 1400 1206 1207 1208 1208 1208 1208 1208 1208 1208 1208
AS&U Kewaunee Mfg. Co. AS&U Keyes Fibre Sales Corp. AS&U Kuehne Manufacturing Company Leavitt Bleacher Co. AS&U Lagge Co., Inc., Walter G. AS&U Libhey-Owens-Ford AS&U Loxit Systems Mackin Venetian Blind Co. Manley, Inc. AS&U Master Lock Company Mastic Tile Corp. of America Maxim Silencer Company Mayline Company, Inc. AS&U Medart Products, Inc., Fred Meese, Inc. AS&U Metalab Equipment Corp. AS&U Metalab Equipment Corp. AS&U Midwest Folding Products Mississippi Glass Company AS&U Mitchell Mfg. Co. Monroe Company, The AS&U Montgomery Mfg. Co. Morgan Co., The AS&U Multi-Clean Products, Inc. National Electrical Mfrs. Assn. AS&U National School Furniture Co. AS&U Nesbitt, Inc., John J.	
AS&U Kewaunee Mfg. Co. AS&U Keyes Fibre Sales Corp. AS&U Kuehne Manufacturing Company Leavitt Bleacher Co. AS&U Lagge Co., Inc., Walter G. AS&U Libbey-Owens-Ford AS&U Loxit Systems Mackin Venetian Blind Co. Manley, Inc. AS&U Master Lock Company Mastic Tile Corp. of America Maxim Silencer Company Mayline Company, Inc. AS&U Medart Products, Inc., Fred Meese, Inc. AS&U Metalab Equipment Corp. AS&U Metalab Equipment Corp. AS&U Michaels Art Bronze Co. AS&U Midwest Folding Products Mississippi Glass Company AS&U Mitchell Mfg. Co. Monroe Company, The AS&U Montgomery Mfg. Co. Morgan Co., The AS&U Multi-Clean Products, Inc. National Electrical Mfrs. Assn. AS&U National School Furniture Co. AS&U Nesbitt, Inc., John J. AS&U Nesbitt, Inc., John J. Neubauer Mfg. Co. Neubauer Mfg. Co. Neubauer Mfg. Co. Neubauer Mfg. Co.	176 233 173 1400 1200 1200 1200 1200 1200 1200 1200
AS&U Kewaunee Mfg. Co. AS&U Keyes Fibre Sales Corp. AS&U Kuehne Manufacturing Company Leavitt Bleacher Co. AS&U Lagge Co., Inc., Walter G. AS&U Libhey-Owens-Ford AS&U Loxit Systems Mackin Venetian Blind Co. Manley, Inc. AS&U Master Lock Company Mastic Tile Corp. of America Maxim Silencer Company Mayline Company, Inc. AS&U Medart Products, Inc., Fred Meese, Inc. AS&U Metalab Equipment Corp. AS&U Metalab Equipment Corp. AS&U Midwest Folding Products Mississippi Glass Company AS&U Mitchell Mfg. Co. Monroe Company, The AS&U Montgomery Mfg. Co. Morgan Co., The AS&U Multi-Clean Products, Inc. National Electrical Mfrs. Assn. AS&U National School Furniture Co. AS&U Nesbitt, Inc., John J.	1766; 21 179 179 179 179 179 179 179 179 179 17

	Owen-Illinois, Kimble Glass Company
	Pabco Products, Inc 185
	Page Fence Division, American Chain & Cable Co., Inc
AS&U	Penn. Slate Producers Guild, Inc 170
	Peterson & Co., Inc., Leonard 122 Photo Materials 207
AS&U	Pittsburgh Corning Corp112, 113
	Pittsburgh Plate Glass Co24, 25
	Powers Regulator Co., The 4
	Pratt and Lambert, Inc 133
	Presto Recording Corp 146
AS&U	Radio Corporation of America94, 95
	Raleigh Hotel
AS&U	Recreation Equipment Corp 207
AS&U	Richards-Wilcox Mfg. Co
	Rols:reen Company, The 117
AS&U	Rowles Company, E. W. A
	Royal Typewriter Ca109
AS&U	Safway Steel Products, Inc 195
	St. Regis Paper Co
AS&U	Sanymetal Products Co., Inc., The 150
AS&U	Schieber Sales Co 119
	School Executive, The
	Sexauer Mfg. Co., Inc., J. A 158
AS&U	Shwayder Bros. Inc
AS&U	Sico Grandstands, Inc., Div. of
	Wace Mfg. Co 186 Simoniz Company 156
	Smithcraft Lighting Division 152
	Snyder Tank Corp 144 Society for Visual Education
AS&U	Spencer Turbine Company 186
ASRII	Straubel Paper Company
7.000	Sylvania Electric Products, Inc 179
	Tennant Company, G. H
AS&U	Tennant Company, G. H
AS&U	Trane Company, The
	U. S. Plywood Corporation
	& Wire Div., U. S. Steel Corp 11 J Universal Bleacher Company
Hook	Universal Manufacturing Corp 20
	Vacuum Can Company
	Vallen, Inc
	Victor Animatograph Corp 10 Viewlex, Inc
AC&I	J Vogel-Peterson Co 14
	Wakefield Company, The
	Ward Body Works 13
	Wenger Music Equipment Co 14 West Disinfecting Company 16, 17: 21
ASR	U Westinghouse Electric Cerporation
NJ G	96, 9 U Westmoreland Metal Mfg. Ce
AS&	White Mop Wringer Company 20
AS&	White Mop Wringer Company 20 U Wooster Products, Inc



How to Get the Most from Your Fuel Dollars

It takes the right control system for waste-free operation of heating and ventilating equipment

Most school administrators are well aware of the money-saving possibilities of installing the most efficient possible heating and ventilating equipment. But that's only the first step towards fuel economy!

KEY TO COSTS

What ultimately determines your operating costs is the way you control this equipment—with the proper thermostats, valves, dampers and other control apparatus. Obviously, even the most efficient heating and ventilating installation actually saves you very little if you are need-

lessly wasting part of its output.

The better the control system, the more money you save in operating costs. And for the finest in control, there's only one possible answer—Johnson Control. The reasons are simple. First, Johnson originated the idea of temperature control systems for schools over 70 years ago, and today offers you more specialized experience than anyone else!

BETTER ENGINEERING PAYS OFF

Equally important, every Johnson System, small or large, is especially

engineered to meet the exact needs of the individual school and its particular heating and ventilating system. And only Johnson's own full-time engineers and mechanics plan and install Johnson Control Systems. Each installation is made exactly as planned. As a result, Johnson Control is unsurpassed not only for economy, but for accuracy and dependability as well.

FOR OLDER BUILDINGS TOO

Johnson Control is not limited to new buildings. It can be installed in existing schools regardless of the type of heating and ventilating system in use. So, whether you are planning a new school or modernizing an older one, why not look further into this matter of automatic temperature control now? Get all the facts on the superior comfort and economy features of Johnson Control. An engineer from a nearby Johnson branch office will gladly make recommendations without obligation, or write for more information to Johnson Service Company, Milwaukee 1, Wisconsin. Direct Branch Offices in Principal Cities.



Acting as the "automatic brain" of your mechanical equipment, modern Johnson Control makes it possible to provide ideal temperature conditions to satisfy the exact need in each room or area in the building without fuel waste.

JOHNSON, CONTROL

PLANNING - MANUFACTURING - INSTALLING - SINCE 1885

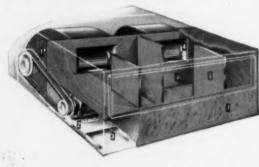


is sometimes the elimination of only 10 annoying decibels of interfering sound





Nesbitt Thermovents are available for vertical, horizontal, and inverted mounting





FEATURES CONTRIBUTING TO SOUND REDUCTION

1. Self-aligning, sleeve-type fan shaft bearings.

Two-speed, sleeve-bearing motor insulated by a resilient mounting.
 Ventilated compartment isolates the motor from the air stream.

4. Large diameter, forward curved fans, operating at low tip speed.

5. Large plenum chamber lets alf from fans expand, reduces sound.
6. Baffle plates in the plenum, are covered with I-inch glass fibre.

7. Lining of 1-inch bonded glass fibre over entire inside of plenum. The plenum and its lining reduce noise level at least 11 decibels.

How much are 10 decibels worth?

When an auditorium is plagued by a high level of air and mechanical noise from the ventilating equipment, it would be worth—and it would cost—thousands of dollars to reduce the interference by as much as ten decibels. But a reduction of 10 to 15 decibels in the noise level can be assured by the investment of only a few extra dollars made at the *right time*: when the mechanical equipment is selected!

Nesbitt makes a full line of heating and ventilating units for assembly places requiring high-capacity, high-volume operation—a demand directly opposed to quiet performance. Yet these Nesbitt Series T Thermovents are designed fully to accomplish their rated task with a degree of sound reduction 10 to 15 decibels greater than that of other makes because only Nesbitt offers all these sound-absorbing features.

When you specify Nesbitt Thermovents for your new auditorium you guarantee its thermal comfort — and the attenuation of at least 11 decibels of system noise through the Nesbitt low-speed fans, vibration eliminators, quiet-operating motors, and sound-absorbing plenum and baffles lined with 1-inch glass fibre.

It will pay you to read the whole story; write for a copy of Publication 103.

Wenbitt THERMOVENT

Made and sold by John J. Nesbitt, Inc., Phila. 36, Pa.
Sold also by American Blower Corporation
Offices in principal cities—see telephone directory